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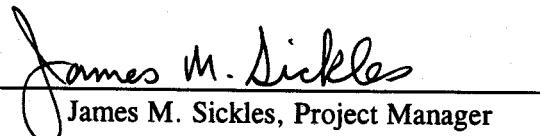
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**FINAL FACILITY-WIDE GROUNDWATER
MONITORING PLAN**
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

April 5, 1996

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**PUBLIC SUMMARY
FOR THE FINAL FACILITY-WIDE GROUNDWATER MONITORING PLAN
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**
April 5, 1996

At Hunters Point Annex, three water bearing zones have been found, the A-aquifer, the B-aquifer, and the bedrock water-bearing zone. The A-aquifer consists of the soil used in the artificial fill throughout the site, the B-aquifer consists of a deeper sand zone found below the A-aquifer separated by a thick layer of bay mud, and the bedrock water-bearing zone is the weathered or fractured bedrock containing groundwater.

Based on groundwater sampling and chemical analysis, 16 contaminant-affected groundwater areas (3 in Parcel B, 3 in Parcel C, 5 in Parcel D, and 5 in Parcel E) were identified at Hunters Point Annex. These areas of groundwater are usually affected by one or more of the following contaminants: (1) petroleum hydrocarbons such as diesel, gasoline, and motor oil; (2) volatile organic compounds that are carbon containing compounds that evaporate easily at room temperature commonly used in dry cleaning, paint stripping, metal plating and machinery decreasing; (3) semivolatile organic compounds with low evaporation rates such as laboratory cleaner phenol, and (4) pesticides and polychlorinated biphenyls that were used in oils in electrical equipment.

The Navy prepared this facility-wide groundwater monitoring plan to describe the facility-wide groundwater monitoring program to be implemented at Hunters Point Annex in the future. A total of 332 monitoring wells were installed at Hunters Point Annex by the Navy before July 1995. These monitoring wells are used to collect groundwater samples to determine where contamination is located, and to measure groundwater levels to determine the direction of groundwater flow. To determine if contaminant-affected areas move with groundwater, groundwater samples will be collected from the monitoring wells installed within or near the contaminant-affected groundwater areas periodically.

The final groundwater monitoring plan prepared by the Navy contains the following information:

- How often groundwater levels will be measured
- Which monitoring wells will be sampled, and how often
- What analyses will be performed for the groundwater samples collected from the monitoring wells

Groundwater level measurement will be performed at all monitoring wells at Hunters Point Annex quarterly for one year. Groundwater sampling will be performed at 132 selected monitoring wells, which were installed before July 1995, either quarterly, semiannually, or annually. In addition to the 124 selected wells, all monitoring wells installed after July 1995 will be sampled quarterly for one year. The samples from the wells will be submitted to a laboratory for chemical analysis. The analyses to be performed will depend on the contaminants that have already been identified in the contaminant-affected groundwater areas. The Navy will prepare quarterly and annual reports to present the results of groundwater level measurement and groundwater sampling and analysis. The list of monitoring wells to be sampled and the analyses to be performed will be reviewed and updated annually.

1.0 INTRODUCTION

This facility-wide groundwater monitoring plan for Hunters Point Annex (HPA) in San Francisco, California, is prepared by PRC Environmental Management, Inc. (PRC), for the Department of the Navy, Naval Facilities Engineering Command, Engineering Field Activity West (EFA WEST), under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract No. N62474-D-7609 (CLEAN II), Contract Task Order (CTO) 0026. The tasks of CTO No. 0026 are (1) to revise the facility-wide groundwater monitoring plan prepared by Harding Lawson Associates (HLA 1992a) to include all new wells, and the background, downgradient, and cross-gradient wells into the monitoring program; and (2) to prepare a health and safety plan for the projected field work. This groundwater monitoring plan is submitted as a deliverable for task 1 of CTO 0026. A health and safety plan, which is a deliverable for task 2 of CTO 0026, will be submitted to the Navy following regulatory agency approval of this monitoring plan.

1.1 PURPOSE

This monitoring plan describes the groundwater monitoring program to be implemented at HPA following completion of the remedial investigation (RI). The purposes of implementing groundwater monitoring at HPA are to:

- Confirm that groundwater contamination plumes are not migrating, or if they are, to monitor the groundwater contamination plume migration rate
- Monitor groundwater level and hydraulic gradient changes that could influence contamination plume migration patterns
- Monitor concentration trends within groundwater contamination plumes over time to establish baseline conditions for future remedial actions

In 1992, HLA developed a facility-wide groundwater monitoring plan for HPA (HLA 1992a) that focused on sampling the wells installed at contaminated soil areas or within groundwater contamination

plumes. The focus of that plan was on monitoring concentration trends; it did not consider sampling the upgradient, downgradient, and cross-gradient wells, which should be monitored to evaluate if groundwater contamination is migrating. Subsequent to the 1992 plan, the California Base Closure Environmental Committee (CBCEC) published its "Long-Term Ground Water Monitoring Program Guidance," which recommended monitoring in-plume, upgradient, downgradient, and cross-gradient wells as part of groundwater monitoring (CBCEC 1994).

The purpose of this monitoring plan is to:

- Establish criteria for selection of groundwater monitoring wells to be sampled and analytes to be monitored
- Evaluate the existing monitoring wells according to the established criteria
- Create a list of monitoring wells and analytes to be monitored under the groundwater monitoring program for HPA. This groundwater monitoring plan will apply to monitoring wells after the RI sampling is completed.

The well selection criteria will be developed based on the groundwater monitoring guidelines suggested in the "Long-Term Ground Water Monitoring Program Guidance" (CBCEC 1994) and on the hydrogeologic and groundwater contamination conditions at HPA.

1.2 ASSUMPTIONS

The following assumptions were made in preparing this monitoring plan:

- The nature and extent of groundwater contamination will be fully characterized during the RI (that is, no new groundwater contamination plumes will be discovered).
- Seasonality has no significant effect on characterizing historic releases to groundwater and migration of plumes.

- This monitoring plan will be updated if a groundwater contamination plume boundary is changed due to additional data available from (1) the groundwater monitoring, (2) the ongoing RI, or (3) remediation measures taken at the site.

1.3 ORGANIZATION OF THE PLAN

Section 2.0 of this monitoring plan summarizes the background information for HPA, such as facility description and history, previous environmental investigations and groundwater monitoring program, environmental settings, and the nature and extent of groundwater contamination. Section 3.0 presents the groundwater monitoring program, including groundwater monitoring objectives, approach, selection of monitoring wells and analyses, future revisions to the monitoring plan, and reporting of monitoring results. Section 4.0 summarizes the field procedures to be used in implementing this monitoring plan. References are presented after Section 4.0. Figures are presented after the references, followed by tables. Appendices A through D are presented after the figures and tables.

2.0 BACKGROUND

This section presents background information on the HPA facility, including a site description and history; a summary of previous environmental investigations and the previous groundwater monitoring program; a description of the general environmental setting, such as the climate and meteorology, surface features and topography, and surface water drainage and sanitary sewer line systems; a summary of site geology, hydrogeology, and soils; and a discussion of the nature and extent of groundwater contamination at HPA.

2.1 FACILITY DESCRIPTION AND HISTORY

HPA is located on a peninsula in southeast San Francisco and extends east into San Francisco Bay (Figure 1). The Navy property comprises approximately 965 acres, of which approximately 500 acres is on land and the rest is in San Francisco Bay. HPA is bounded on the north and east by San Francisco Bay and on the south and west by the Bayview-Hunters Point district of San Francisco,

which consists of public and private housing and commercial and industrial buildings. The north and east shores of HPA are developed for ship repair with drydocks and berths; there are no shipping facilities on the southwest shore.

HPA operated as a commercial drydock facility from 1869 until December 29, 1939, when the property was purchased by the Navy. The Navy leased the facility to the Bethlehem Steel Company until December 18, 1941. On that date, the Navy took possession and began operating the shipyard to provide accelerated production of Liberty ships during World War II. Navy ships and submarines were also modified, maintained, and repaired there. HPA was also used for personnel training, limited radiological operations, research and development, ship design, and nonindustrial services for Navy personnel and their families. In 1975, the Navy ceased shipyard operations, placed the facility in industrial reserve, and transferred control to its Office of the Supervisor of Shipbuilding Conversion and Repair, San Francisco.

Between 1935 and 1975, fill materials were placed in San Francisco Bay, increasing the land area of the facility from less than 100 acres to approximately 500 acres. Filling throughout HPA appeared to be complete by 1975. Aerial photographs indicate that extensive cut-and-fill operations took place sometime between 1935 and 1948. Although documentation of the cut-and-fill operations is not known to exist, review of aerial photographs from the 1940s indicates that most of the cutting and filling occurred soon after the Navy took possession of the property in late 1941.

In 1991, HPA became slated for closure pursuant to the terms of the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510). Contamination at HPA was to be remediated and the property made available for nondefense use. HPA was designated as a "B" site by the Agency for Toxic Substances and Disease Registry in 1991, meaning that it poses no imminent threat to human health but has the potential to pose a long-term threat to human health.

From April 1990 to March 1994, Hunters Point Naval Shipyard was an annex of the Treasure Island Naval Station. On March 31, 1994, control of HPA was transferred to Naval Facilities Engineering Command, Western Division, in San Bruno (WESTDIV, now EFA WEST).

2.2 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

In 1975, the U.S. Department of Defense initiated a program to identify and investigate potential hazardous waste sites at military installations. The program resulted from increasing public and government concern over the potential impacts of past hazardous waste disposal practices at military installations.

In the early 1980s, the Navy established its first environmental program, the Navy Assessment and Control of Installation Pollutants (NACIP). NACIP consisted of three phases: (1) an initial assessment, (2) a confirmation study consisting of verification and characterization of potential contamination at sites, and (3) remedial action measures. At HPA, the first phase of the NACIP program was completed in 1984 and identified 12 areas throughout HPA of possible hazardous waste materials disposal or spills to be investigated (Naval Energy and Environmental Support Activity [NEESA] 1984). The confirmation study conducted by the Navy recommended further characterization of 11 of the 12 sites (EMCON 1987).

Concurrent with the formation of the NACIP program, the U.S. Congress directed the U.S. Environmental Protection Agency (EPA) to develop a comprehensive program to manage past disposal sites. The basis for the EPA program is the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). In 1988, the NACIP program adopted the terminology and approach from CERCLA. This became the Navy's Installation Restoration (IR) Program.

HPA was placed on the National Priorities List (NPL) in 1989. In 1991, representatives of the Navy, EPA, and the California Department of Toxic Substances Control (DTSC) signed the federal facilities

agreement (FFA) for HPA. The FFA establishes a procedural framework and schedule for ensuring that the environmental impacts associated with past and present activities at HPA are thoroughly investigated and appropriately remedied to protect human health and the environment. In the HPA FFA, the 20 IR sites that had been identified by that time were grouped into five operable units based on the locations of the sites, similarities in investigations or remediation strategies, or similarities in chemical conditions.

The use of operable units was found to be unworkable at HPA. The initial assumption that each operable unit could be completely characterized independently of adjacent sites was impractical, especially because the HPA utilities systems crossed several of the operable unit boundaries. Because of this factor and the need to expedite the cleanup and transfer of HPA to the City and County of San Francisco for reuse, HPA was divided into geographic parcels. This process began in January 1992, and the designation of Parcels A through E was formally submitted to the regulatory agencies in April 1992. A map of HPA showing the geographic parcels and the locations of the IR and site inspection (SI) sites is shown on Figure 2. Figure 3 shows the chronology of HPA investigations and site groupings, from operable unit designations to the current grouping by geographic parcels.

IR program sites at HPA follow the CERCLA process, undergoing a sequence of investigations to characterize the nature and extent of contamination, and to collect information needed to remediate the sites. The first step is the preliminary assessment (PA), which includes record searches, interviews, and limited field investigation. Sites needing further investigation are carried through to the SI phase. The SI includes the collection and evaluation of additional field data. Finally, sites needing more investigation are carried through to the RI phase. The RI includes field work to characterize the lateral and vertical extent of contaminants and the movement of contaminants, and to assess the risks posed by the site to human health and the environment. The final steps are remedial design and remedial action. Anywhere along the process, expedited response actions, such as removal actions, can be initiated if the data collected indicates that there is a threat to human health or the environment.

In addition to the IR program, a total of 36 underground storage tanks (UST) were removed, and 10 USTs were closed in place between 1991 and 1993 (PRC 1994a). The recommended further investigations at these UST sites have been incorporated into the ongoing RI.

To date, 77 sites at HPA have been identified under the Navy's IR Program. These sites include "IR" and "SI" sites. At HPA, designation of a site as "IR" indicates that the site has undergone PA- and SI-level investigation under the CERCLA process and has been recommended for further investigation at the RI level. Designation of a site as "SI" indicates that the site has undergone PA- and SI-level activities and no further investigation is necessary. Table 1 shows a list of the 77 IR and SI sites at HPA. The Parcel A RI and feasibility study (FS) was completed in early 1995. Currently, the Navy is conducting RI/FS activities in Parcels B through E.

2.3 PREVIOUS GROUNDWATER MONITORING PROGRAM

A total of 332 groundwater monitoring wells have been installed at various locations throughout HPA during the SI and RI before July 1995. All groundwater monitoring wells installed during previous investigations have been sampled two to three times. From September 1993 to October 1994, four consecutive quarters of groundwater monitoring were conducted at OU II, which consists of sites IR-06, IR-08, IR-09, and IR-10.

Groundwater monitoring at these sites was conducted according to the monitoring program described in Appendix A of the facility groundwater monitoring plan (FGMP) (HLA 1992a). A total of 35 monitoring wells and piezometers (including 13 wells at site IR-06, 5 at IR-08, 12 at IR-09, and 5 at IR-10) were selected for quarterly monitoring, and an additional 7 wells (3 wells at IR-06, 1 at IR-08, and 3 at IR-10) were selected for annual monitoring. These 42 monitoring wells were installed before July 1992. Monitoring wells installed after July 1992 were not included in the OU II monitoring program. The list of monitoring wells included in the OU II groundwater monitoring program and groundwater level and chemical concentration monitoring results are presented in the "Draft OU II Annual Groundwater Monitoring Report" (HLA 1995). The OU II sampling results indicated that

changes in chemical concentrations over the four quarters appears to be less than half an order of magnitude compared to the lowest observed values (HLA 1995).

2.4 GENERAL ENVIRONMENTAL SETTING

This section summarizes the climate and meteorology, surface features and topography, and surface water drainage and sanitary sewer line systems at HPA.

2.4.1 Climate and Meteorology

The climate at HPA is characterized by partly cloudy, cool summers with little precipitation and mostly clear, mild winters with rainstorms. Air monitoring conducted at HPA indicates that the prevailing wind direction is west to east (Brown and Caldwell 1995). Therefore, airborne dust and volatile emissions are expected to be transported primarily to the east. The average and maximum wind speeds at HPA are approximately 5 and 10 meters per second, respectively (HLA 1992b).

2.4.2 Surface Features and Topography

Between 70 and 80 percent of the land area of HPA is relatively level lowlands constructed by excavating portions of the Hunters Point Ridge and placing fill materials along the San Francisco Bay margin. The remaining land is a moderately to steeply sloping ridge in the northwest portion of HPA. Elevations range from 0 to 18 feet above mean sea level (msl) in the lowlands to 180 feet above msl at the ridge crest in Parcel A.

2.4.3 Surface Water Drainage and Sanitary Sewer Line Systems

Surface water at HPA drains primarily in sheet-flow from either the highlands of Parcel A to the surrounding lowlands, or from the lowlands themselves. Only about 10 percent of HPA, composed of undeveloped shoreline, some pier areas, and a trailer parking lot, are not served by the storm water

drain system. Runoff is collected by the storm drain system and discharged to San Francisco Bay through several outfalls.

No naturally occurring channelized drainage remains at HPA. Preexisting drainage channels were filled or modified by construction over the years. There are a few springs and seeps created by the south-facing cut-face slopes at the central portion of Parcel A, and lesser seeps on the northeast face of the parcel. These springs and seeps have not developed drainage channels. Runoff from these areas, if present, is captured by the storm drain system or in ponds in low-lying areas.

HPA is served by a sanitary sewer system that collects facility-generated sanitary sewage and conveys it to the City and County of San Francisco (CCSF) Southeast Wastewater Pollution Control Plant (SEWPCP) through Pump Station A, which is located west of Building 813 at Parcel A. This plant, a publicly owned treatment works (POTW), is 1.1 miles north of the HPA main gate at Innes Avenue. The HPA sanitary sewer line system was originally part of the combined sanitary sewer and storm drain system. Portions of the system were constructed between 1942 and 1958. Separation of the sanitary sewers from the storm drain system began in 1958 and was largely completed by 1976 (YEI 1988a and 1988b).

Although current pumping rates for sanitary sewers are unknown, the capacity for sewage conveyed through Pump Station A is designed for about 20,000 tenants. Currently, less than 2,000 tenants are present at HPA, and groundwater is likely captured by the sewer system and pumped through the sewer line system and discharged to the CCSF SEWPC. Direct flow measurements at Pump Station A in 1987 during dry and light rain weather conditions confirm severe infiltration problems in the sanitary sewer system. Projected over 24 hours, the Pump Station A pumping rate for dry weather was 0.22 to 0.29 million gallons per day (mgd) while for light rain it was 1.0 mgd. This infiltration is thought to occur through direct communication with groundwater from adjacent saturated soils.

2.5

GEOLOGY

HPA is located on the east side of the San Francisco Peninsula, which is in the central Coast Ranges geomorphic province of California. The Coast Ranges consist of a series of northwest trending ranges and valleys averaging about 50 miles in width. These ranges end abruptly along the west coast of California, and terminate more gently along the edge of the alluvial plain of the Great Valley in the east. San Francisco Bay occupies an ancient valley that was inundated by slowly rising seas, resulting from the melting of the vast continental glaciers during Quaternary time. The structural geology and stratigraphy of HPA are described below. Table 2 presents the geologic units at HPA as they correspond to hydrogeologic units.

2.5.1 Structural Geology

The regional structural trend in the central Coast Ranges is northwest-southeast, with local variations. The major faults and folds, which trend northwest-southeast, control the orientation of ranges and valleys. Block faulting has been reported as the key structural evolution of the Coast Ranges in the bay area. The bay itself occupies a down-dropped or tilted block.

The peninsula forming HPA is within a northwest trending belt of Franciscan Complex Bedrock known as the Hunters Point Shear Zone (Bonilla 1971). This belt extends southeast to northwest, diagonally from Hunters Point through the City of San Francisco to the south abutment of the Golden Gate Bridge at Fort Point (Wahrhaftig 1984; Wakabayashi 1992). Rocks within this belt are intensely deformed and sheared, and form a serpentinite and melange belt. Geologic contacts between different rock types within the Franciscan Complex Bedrock are typically sheared.

2.5.2 Stratigraphy

HPA is underlain by six geologic units, the youngest of Quaternary age and the oldest being Franciscan Complex Bedrock of Jurassic-Cretaceous age. In general, the stratigraphic sequence of these units,

from youngest (shallowest) to oldest (deepest), is as follows: Artificial Fill (Qaf); Slope Debris and Ravine Fill (Qsr); Undifferentiated Upper Sand Deposits (Quus); Bay Mud Deposits (Qbm); Undifferentiated Sedimentary Deposits (Qu); and Franciscan Complex Bedrock. A detailed description of geologic units and the distribution of these units at HPA, including their elevations and relationships to hydrogeologic units can be found in the "Draft Technical Memorandum, Integration of Facility-Wide Hydrogeologic Data" (also known as the HPA hydrogeologic report) (PRC 1994b).

The Franciscan Complex Bedrock at HPA, consisting predominantly of serpentinite, is fractured and weathered at the surface; the fractures provide a pathway for groundwater flow, and the weathered surfaces are porous media for groundwater flow. Other rock types of the Franciscan Complex Bedrock include greenstone, sandstone, chert, and shale. Serpentinite forms a major portion of the fills and highlands at HPA.

There are three types of Artificial Fill at HPA: (1) bedrock-derived fill from upland areas of Parcel A; (2) industrial fill consisting of domestic and industrial wastes, including sandblast materials and construction debris; and (3) more recently imported sand and gravel backfill material, placed as a cover over site IR-1/21 (Industrial Landfill at Parcel E). There is also sand emplaced along sewer lines and other utility lines as bedding material. The Artificial Fill serves as porous media for groundwater flow.

Colluvial deposits, referred to as Slope Debris and Ravine Fill by Bonilla (1971), may also be present locally above the Franciscan Complex Bedrock, Undifferentiated Sediments Deposits, Bay Mud Deposits, or Undifferentiated Upper Sand Deposits. Slope Debris and Ravine Fill are difficult to differentiate from bedrock-derived Artificial Fill. The higher elevations of Parcel A consist of the bedrock covered by sandy, silty, clayey, and surficial soils, possibly representing Slope Debris and Ravine Fill deposits. The colluvial deposits, Undifferentiated Sedimentary Deposits, and Undifferentiated Upper Sand Deposits serve as porous media for groundwater flow. The Bay Mud Deposits have a low permeability and act as barriers to groundwater flow

2.6

HYDROGEOLOGY

Two aquifers and one water-bearing zone have been identified at HPA and are designated the A-aquifer, B-aquifer, and the Bedrock Water-Bearing Zone. Table 3 summarizes the numbers of monitoring wells and piezometers installed in the A-aquifer, B-aquifer, and Bedrock Water-Bearing Zone at different IR sites at HPA. Detailed construction information for the monitoring wells is presented in Appendix A. Figure 4 shows the locations of groundwater monitoring wells at HPA. The following subsections describe the general features of the A-aquifer, B-aquifer, and Bedrock Water-Bearing Zone at HPA. Detailed descriptions of these aquifers and the water-bearing zone at each parcel of HPA can be found in the HPA hydrogeologic report (PRC 1994b).

2.6.1

A-aquifer

The A-aquifer, the most fully characterized aquifer at HPA, consists of saturated porous media such as fill materials and Undifferentiated Upper Sand Deposits overlying Bay Mud Deposits. The A-aquifer may overlie bedrock directly in excavated areas adjacent to the former 1935 shoreline. The A-aquifer is unconfined (groundwater is under atmospheric pressure), with depths to groundwater ranging from 2 to 15 feet below ground surface (bgs). The aquifer is recharged by precipitation infiltration in the unpaved areas (especially within Parcel E), bay water intrusion, and possible water leakage from some sections of the storm drains. In areas where sewer lines are below the groundwater, or where groundwater is influenced by Pump Station A (located at Parcel A), the sewer system may serve as a hydrogeologic discharge or sink area.

Groundwater flow in the A-aquifer at HPA is complex due to nonuniformity (heterogeneity) in the hydraulic properties of the subsurface fill materials, tidal influences, effects of storm drain and sanitary sewer systems, and variations in topography and drainage. Large variations in hydraulic properties are due to variations in fill type, soil texture, degree of compaction, and distribution of sediments. Groundwater elevation contours for the wet season and dry season are shown on Figures 5 and 6, respectively. The wet season groundwater elevation contours are based on groundwater level

measurement on February 18, 1994, and the dry season groundwater elevation contours are based on groundwater level measurement on August 12, 1994. Groundwater in the A-aquifer generally flows radially from the Parcel A bedrock high toward San Francisco Bay. Locally, the regional flow pattern varies due to several factors: (1) the possible groundwater capture by leaky sanitary sewers and groundwater sinks that form along the traces of the utilities, such as in Parcel D; (2) the possible discharge of water from some sections of underground storm drains or the bedrock along the former 1935 shoreline; and (3) the mounding of groundwater at features such as the buried bedrock high in the southeast corner of Parcel E (sites IR-11 and IR-15)(see Figure 6). Groundwater elevations are generally higher in the wet season as rainfall infiltrates the A-aquifer and the water level rises. Groundwater level at monitoring wells located in the area within 400 feet from shoreline is generally affected by the tidal in the bay. Groundwater quality of the A-aquifer is slightly saline to highly saline, with total dissolved solids (TDS) ranging from 440 to 77,000 milligram per liter (mg/L).

The A-aquifer and the underlying B-aquifer are separated by Bay Mud Deposits, ranging from 5 to 60 feet thick under most of the low-lying areas of HPA (Parcels B through E). Clay and silt, which make up the greatest portion of the Bay Mud Deposits, act as an aquitard or vertical hydraulic barrier (confining layer) between the A- and B-aquifers.

2.6.2 B-aquifer

The B-aquifer consists of saturated porous Undifferentiated Sedimentary Deposits underlying Bay Mud Deposits and overlying the Franciscan Complex Bedrock in the lower elevations of HPA. The B-aquifer is generally a confined, porous media aquifer where groundwater is under pressure. The B-aquifer directly underlies the A-aquifer where Bay Mud Deposits are absent. Due to the absence of Bay Mud Deposits, the B-aquifer is unconfined or semiconfined at these locations. An example of this situation is found in the northern portion of Parcel E (site IR-1/21). Hydrogeologic conditions in the B-aquifer and the effectiveness of the Bay Mud Deposits as an aquitard and barrier to vertical flow are not well known on a facility-wide basis because few monitoring wells were completed in the B-aquifer.

Recharge of the B-aquifer is generally unknown, but groundwater in the Bedrock Water-Bearing Zone is likely to contribute to it.

Groundwater in the B-aquifer at HPA generally flows outward toward San Francisco Bay. Groundwater quality of the B-aquifer is slightly saline, with TDS ranging from 450 to 2,700 mg/L.

2.6.3 Bedrock Water-Bearing Zone

The Bedrock Water-Bearing Zone includes the upper weathered portions or the deeper fractured portions of the Franciscan Complex Bedrock. The Bedrock Water-Bearing Zone appears to be in direct hydraulic communication with the A-aquifer where the A-aquifer directly overlies it. This situation occurs mainly in excavated areas adjacent to the former 1935 shoreline. Groundwater within the bedrock is limited to the discrete fractures or shear zones, or weathered portions.

Recharge to the Bedrock Water-Bearing Zone is likely to be from precipitation, runoff, potential leakage from storm drains and sanitary sewers, and, in some areas, the A-aquifer.

Groundwater flow direction in the Bedrock Water-Bearing Zone at HPA is not discussed because the continuity of the water-bearing zone within the bedrock is not well characterized. Groundwater quality of the Bedrock Water-Bearing Zone at HPA is likely to be fresh in portions of Parcel A (TDS ranging from 360 to 540 mg/L) and slightly saline in Parcel B (TDS ranging from 355 to 4,540 mg/L), and is unknown in Parcels C through E.

2.7 SOILS

Three soil surveys have been performed by the U.S. Department of Agriculture in the San Francisco area, including HPA (U.S. Soil Conservation Service (SCS) 1917, 1966, and 1991). In general, soils at HPA are derived from underlying rocks and weathered material or were imported as fill. Parcel A

is primarily covered by upland soils, while Parcels B through E are primarily covered by bottom land soils.

The Parcel A upland soils consist of Orthents, cut-and-fill Urban land complex, and Urban land. Orthents are very shallow to very deep, very poorly drained to excessively drained soils on uplands, including hills and ridgetops, alluvial fans, coastal terraces, flood plains, and tidal flats. These soils formed in alluvium and are derived from various kinds of rocks, sandy coastal deposits, hard and soft sandstone, shale, siltstone, serpentine, volcanic rock, and various artificial fill materials. Orthents are extremely variable and, because of their complexity and variability, have neither been classified using the Unified Soil Classification System nor had their physical and chemical properties or soil and water features described. Urban land consists of areas covered by driveways, parking lots, houses, or other structures. The soil under these structures was graded or mixed, or covered with fill material. Cut-and-fill consists of areas that have been filled or graded by earth-moving equipment. Fill areas consist of varying amounts of soil, gravel, and other material.

Bottom land soils cover the majority of HPA. These soils exist in areas that were once part of San Francisco Bay and adjacent tidal flats. The properties and characteristics of these soils are highly variable because of the differences in the type and amount of fill material used. Runoff is slow, and the water-erosion hazard is low.

2.8 GROUNDWATER CONTAMINATION AT HPA

A total of 332 groundwater monitoring wells were installed at HPA before July 1995, and approximately 70 monitoring wells are being installed during the ongoing RI at HPA. The monitoring wells installed before July 1995 have been sampled at least twice, and most have been sampled three times during the RI. In addition to RI sampling, 35 monitoring wells at OU II sites (IR-06, IR-08, IR-09, and IR-10) have been sampled for four quarterly sampling events. Generally, the change in chemical concentrations between different sampling events appears to be less than half an order of magnitude compared to the lowest observed values.

This section describes groundwater contamination at HPA. Groundwater contamination plumes are not identified for HPA because cleanup levels for contaminants in groundwater at HPA have not been established. However, the potential contaminant-affected groundwater areas in each parcel are discussed in the following subsections.

A contaminant-affected groundwater area, for the purposes of this monitoring plan, is defined as an area where (1) organic compounds and total petroleum hydrocarbons (TPH) are detected above the detection limits or (2) metals are detected at concentrations above the maximum contaminant levels (MCL) for drinking water, and the elevated levels of metals could be attributed to industrial operations at HPA. Randomly distributed, elevated levels of metals in groundwater that cannot be attributed to industrial operations are not considered to be contaminants in groundwater. Concentrations of some metals, such as nickel, chromium, cobalt, and manganese, are high in the serpentinite bedrock and fills. The elevated concentrations of these metals in groundwater may be naturally occurring and not related to industrial operations at HPA.

The contaminant-affected areas of groundwater (shown on Figures 7 through 11) are delineated based on the available analytical results for grab groundwater samples from soil borings, HydroPunch samples, and groundwater samples collected from the monitoring wells after well purging. Contaminant-affected groundwater areas at HPA are numbered by parcel, from north to south; for example, Area B-3 is in Parcel B and is the third contaminant-affected area down from the northernmost contaminant-affected area in Parcel B.

The Navy is currently conducting an engineering evaluation/cost analysis (EE/CA) to evaluate the removal of three contaminant-affected areas (Areas B-1, C-1, and E-1) under CTO 0007 (PRC 1996a, 1996b, and 1996c). Groundwater contamination at HPA will be partially remediated after the removal of these contaminant-affected areas. The following sections briefly describe the contaminant-affected groundwater areas at Parcels B through E. The Parcel A RI indicated that groundwater contamination is not a concern at Parcel A (PRC 1995a); therefore, groundwater contamination at Parcel A is not discussed here.

2.8.1 Parcel B

Three contaminant-affected groundwater areas (B-1 through B-3) have been identified in Parcel B. The locations of these affected areas are shown on Figures 7 and 11. Table 4 lists the groundwater monitoring wells associated with each affected area. Tables B-1 and B-2 in Appendix B list the detected results for organic and inorganic analytes in groundwater samples collected from Parcel B. The location and constituents of each affected area are described below.

AREA B-1

Groundwater in Area B-1, the largest of the three contaminant-affected areas in Parcel B, is affected by volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), TPH, and heavy metals. Area B-1 extends into sites IR-06, IR-10, IR-20, IR-24, IR-25, IR-26, and IR-46. Area B-1 extends out into the bay to the north and follows the contours of Parcel B to the south. Area B-1 is probably a conglomerate of several distinct contaminant-affected groundwater areas that converge and commingle in different IR sites.

Site IR-06 was a former tank farm for 18 above ground storage tanks (AST), which were removed before 1994. These tanks contained diesel fuel, lube oil, and stoddard solvent. Diesel was reportedly spilled from the tanks at IR-06 in the early 1940s, and the stoddard solvent tank overflowed the berm (HLA 1992b). The rest of the IR sites within Area B-1 consist of buildings. Buildings 123, 125, 128, 130, 134, 156, and 159 are partially or completely within the boundary of Area B-1. Most of the buildings associated with Area B-1 were used as machine shops, except buildings 125 (submarine cafeteria) and 159 (air raid shelter). Waste oils, solvents, paints, hydrocarbons, and other similar compounds were identified as wastes produced from these buildings. Sources for organic compounds in Area B-1 are the leakage and spill from the former ASTs at IR-06, and wastes generated in the buildings within the area.

Groundwater in both the A-aquifer and Bedrock Water-Bearing Zone in Area B-1 is affected by various contaminants. VOCs, SVOCs, PCBs, TPH-diesel, TPH-motor oil, and heavy metals were detected in groundwater samples collected from the A-aquifer monitoring wells. VOCs, TPH-diesel, and TPH-motor oil were detected in groundwater samples collected from the bedrock monitoring wells in site IR-06.

Groundwater in the A-aquifer monitoring wells IR25MW11A1 and IR25MW15A1 contains the highest concentrations of organic contaminants (VOCs, SVOCs, and TPH) in Area B-1. A high concentration of TPH-diesel (3,400,000 micrograms per liter [$\mu\text{g}/\text{L}$]) was detected at well IR25MW11A1. High concentrations of TPH-gasoline (1,800,000 $\mu\text{g}/\text{L}$); VOCs such as trichloroethene (TCE)(4,200 $\mu\text{g}/\text{L}$), tetrachloroethene (PCE)(50,000 $\mu\text{g}/\text{L}$), and 1,2-dichloroethene (DCE, total) (57,000 $\mu\text{g}/\text{L}$); and SVOCs such as 1,2-dichlorobenzene (62,000 $\mu\text{g}/\text{L}$), 1,4-dichlorobenzene (14,000 $\mu\text{g}/\text{L}$), and others were detected at well IR25MW15A1. The highest concentration of PCE in well IR25MW15A1 (50,000 $\mu\text{g}/\text{L}$) is about 33 percent of its aqueous solubility (150,000 $\mu\text{g}/\text{L}$), suggesting the presence of a possible dense nonaqueous phase liquid (DNAPL) in the vicinity of the well (PRC 1996d). Concentrations of antimony, barium, cadmium, lead, nickel, and thallium were detected in various wells across Area B-1 above MCLs for drinking water; however, it is not known if these concentrations are the result of industrial operations at HPA. In addition, a high concentration of hexavalent chromium (1,680 $\mu\text{g}/\text{L}$) was detected in well IR10MW12A, and its source is unknown.

The highest concentrations of VOCs vinyl chloride (11 $\mu\text{g}/\text{L}$) and carbon tetrachloride (28 $\mu\text{g}/\text{L}$) in groundwater in the Bedrock Water-Bearing Zone were detected in monitoring wells IR06MW48F and IR06MW53F, respectively. The highest concentrations of TPH-diesel (2,400 $\mu\text{g}/\text{L}$) and TPH-motor oil (1,100 $\mu\text{g}/\text{L}$) in groundwater in the Bedrock Water-Bearing Zone were detected in monitoring wells IR06MW49F and IR06MW48F, respectively. The presence of these VOCs and TPH in groundwater in the Bedrock Water-Bearing Zone may be attributed to the solvents and diesel fuel stored in the former ASTs at IR-06.

Groundwater in the A-aquifer in Area B-1 generally flows toward the bay. In the southern part of Area

B-1, groundwater flows to a groundwater depression area beneath building 134. This depression may be caused by the infiltration of groundwater to sanitary sewer lines located below the groundwater table.

AREA B-2

Area B-2 is a TPH affected area along the boundary of IR-23. Area B-2 is located at the site of the former UST S-136, at building 118. UST S-136 was a 750-gallon steel tank. The tank held fuel oil and has been removed (PRC 1994b). UST S-136 is considered to be the source of the TPH in Area B-2.

This contaminant-affected area consists of TPH-gasoline and TPH-motor oil. The heavy metals antimony and nickel were also detected in the monitoring wells, but the concentrations are probably not associated with UST S-136. Monitoring wells UT03MW11A and UT03MW12A contained TPH-motor oil concentrations at 840 $\mu\text{g}/\text{L}$ and 110 $\mu\text{g}/\text{L}$, respectively. TPH-gasoline was detected in UT03MW12A at 86 $\mu\text{g}/\text{L}$.

Groundwater in the A-aquifer in Area B-2 appears to flow north, toward the bay.

AREA B-3

Area B-3 is a TPH-affected area in site IR-62. Area B-3 is located at the site of the former UST S-135, at building 116. UST S-135 was a 1,250-gallon steel tank. The tank held fuel oil and was removed (PRC 1994b). UST S-135 is considered to be the source of TPH in Area B-3.

TPH-motor oil was detected at a maximum concentration of 1,200 $\mu\text{g}/\text{L}$ in well UT02MW17A. TPH-diesel was detected in well UT02MW15A at a maximum concentration of 3,700 $\mu\text{g}/\text{L}$.

Beta-BHC, a pesticide, was detected in well UT02MW15A at a low concentration (0.14 $\mu\text{g}/\text{L}$).

Groundwater in the A-aquifer in Area B-3 appears to flow north, toward the bay.

2.8.2 **Parcel C**

Three contaminant-affected groundwater areas (C-1 through C-3) have been identified in Parcel C. The locations of these areas are shown on Figures 8 and 11. Table 5 lists the groundwater monitoring wells associated with each area. Tables B-3 and B-4 in Appendix B list the detected results for organic and inorganic analytes in groundwater samples collected from Parcel C. The location and constituents of each contaminant-affected area are described below.

AREA C-1

Area C-1, the largest contaminant-affected groundwater area in Parcel C, is affected by VOCs, SVOCs, PCBs, and TPH. Area C-1 extends under a number of buildings and USTs (Figure 8). Buildings 211, 224, 231, and 253 are within this area. These buildings consist of a machine and electronic test and repair shop, an air raid shelter, a machine shop, and an electronics and optical shop, respectively. Waste oils, acids, solvents, paints, hydrocarbons, and other similar compounds were identified as wastes produced from these buildings. There are 13 USTs within Area C-1: HPA-01, HPA-03, HPA-04, HPA-05, HPA-10, HPA-12, HPA-14, HPA-16, HPA-17, S-001, S-002, S-003, and S-004. All USTs have been removed except HPA-12 and HPA-16, which were closed in place (PRC 1994a). The contents of these USTs were gasoline, diesel, solvents, and fuel oil. Contaminant sources in Area C-1 are considered to be leakages from the USTs and wastes generated in the buildings within the area.

Groundwater in the A-aquifer and B-aquifer in Area C-1 is affected by VOCs, SVOCs, PCBs, TPH-diesel, THP-gasoline, and TPH-motor oil. Groundwater in the Bedrock Water-Bearing Zone in this area is not affected by any contaminants. VOCs (at less than 1,600 µg/L), SVOCs (at less than 80 µg/L), PCBs (at less than 2.9 µg/L), TPH-diesel (at less than 4,800 µg/L), TPH-gasoline (at less than 740 µg/L), and TPH-motor oil (at less than 5,000 µg/L) were detected in the A-aquifer monitoring

wells within this area. The wells with the highest contaminant concentrations within this area are IR28MW51A, IR28MW127A, IR28MW129A, IR28MW136A, and IR28MW151A. TPH-motor oil (up to 160 µg/L) was detected in groundwater samples collected from the B-aquifer well (IR28MW173B). In addition to the organic compounds detected in the area, the detected mercury (0.52 µg/L) in well IR28MW124A, chromium (286 µg/L) in well IR28MW125A, and thallium (2.58 µg/L) in well IR28MW150A exceeded the MCLs for drinking water. These three wells are located close to the eastern edge of the area. The sources of mercury and thallium are unknown. No contaminant was detected above its detection limit in the bedrock monitoring wells within the boundary of this area (IR28MW140F and IR28MW255F).

Groundwater in the A-aquifer in Area C-1 flows to the south and east, toward the bay.

AREA C-2

Area C-2 is within sites IR-28 and IR-58 and is affected by VOCs, SVOCs, and TPH. Area C-2 extends under buildings 251, 258, 270, 271, 272, and 281 (Figure 8). Building 251 was an industrial relations and central tool room, building 258 was a pipefitters' shop, buildings 270 and 271 were paint shops, building 272 was a hardware shop, and building 281 was an electronic weapons precision facility. Solvents, TCE, freon, acids, sodium hydroxide, and paints were identified as wastes produced from these buildings. The contaminant sources in Area C-2 are considered to be the wastes generated in the buildings within this area.

Groundwater in both the A-aquifer and the Bedrock Water-Bearing Zone in Area C-2 have been affected by organic contaminants. VOCs (at less than 7,500 µg/L), SVOCs (at less than 1,700 µg/L), TPH-diesel (at less than 2,200 µg/L), and TPH-gasoline (at less than 12,000 µg/L) were detected in A-aquifer monitoring wells within the area. VOCs (at less than 19,000 µg/L), TPH-gasoline (at less than 550 µg/L), and TPH-motor oil (at less than 110 µg/L) were detected in the bedrock monitoring wells. The well with the highest contaminant concentrations in the A-aquifer is IR58MW31A, and the bedrock well with the highest contaminant concentrations is IR28MW211F. In addition to the organic

compounds detected in the area, the detected thallium ($3.3 \mu\text{g}/\text{L}$) in well IR28MW201F exceeded the MCL for drinking water. The source of thallium is unknown.

Groundwater in the A-aquifer in Area C-2 flows to the south and east, toward the bay.

AREA C-3

Area C-3 is within site IR-29 and is affected by VOCs, SVOCs, and TPH (Figure 8). Area C-3 is in the southern tip of IR-29, extending north along the IR site boundary. USTs S-203, S-209, S-210, S-211, S-212, and S-213 are within this area. All the USTs were removed except for S-209 and S-210, which were closed in place (PRC 1994b). These USTs contained fuel oil and gasoline and are considered to be the sources for the contaminants detected in groundwater in Area C-3.

Groundwater in both the A-aquifer and the Bedrock Water-Bearing Zone in Area C-3 have been affected by organic contaminants. SVOCs (at less than $13 \mu\text{g}/\text{L}$), TPH-diesel (at less than $1,800 \mu\text{g}/\text{L}$), TPH-gasoline (at less than $160 \mu\text{g}/\text{L}$), and TPH-motor oil (at less than $510 \mu\text{g}/\text{L}$) were detected in A-aquifer monitoring wells within the area. VOCs (at less than $39 \mu\text{g}/\text{L}$), SVOCs (at less than $42 \mu\text{g}/\text{L}$), TPH-diesel (at less than $4,300 \mu\text{g}/\text{L}$), and TPH-motor oil (at less than $900 \mu\text{g}/\text{L}$) were detected in the bedrock monitoring wells. The A-aquifer well with the highest contaminant concentrations is IR29MW57A, and the bedrock well with the highest contaminant concentrations is IR28MW56F.

Groundwater in the A-aquifer in Area C-3 flows to the south, toward the bay.

2.8.3 Parcel D

Five contaminant-affected groundwater areas (D-1 through D-5) have been identified in Parcel D. The locations of these areas are shown on Figures 9 and 11. Table 6 lists the groundwater monitoring wells associated with these areas. Tables B-5 and B-6 in Appendix B list the detected results for organic and

inorganic analytes in groundwater samples collected from Parcel D. The location and constituents of each contaminant-affected area are described below.

AREA D-1

Area D-1 is within sites IR-33 and IR-34 and is affected by VOCs, SVOCs, and TPH. Buildings 302A, 304, and 363 are located within the boundary of Area D-1. Buildings 302A and 304 were vehicle repair and service shops. Building 363 was used as a wood working shop. The known wastes generated in these buildings are petrochemicals and paint. USTs 304 and 305 are located within the area. These two USTs were used to store gasoline. Both tanks have been removed (PRC 1994b). The sources for contaminants in Area D-1 are considered to be USTs 304 and 305 and wastes generated in the buildings within the area.

VOCs (at less than 1,200 $\mu\text{g/L}$), SVOCs (at less than 58 $\mu\text{g/L}$), TPH-diesel (at less than 1,700 $\mu\text{g/L}$), TPH-gasoline (at less than 8,800 $\mu\text{g/L}$), and TPH-motor oil (at less than 610 $\mu\text{g/L}$) were detected in A-aquifer monitoring wells within the area. The well with the highest contaminant concentrations in Area D-1 is IR33MW61A. In addition to the organic compounds, arsenic (70 $\mu\text{g/L}$) was detected at well IR33MW61A above the MCL for drinking water. The source for arsenic is unknown.

Groundwater flow in the A-aquifer in Area D-1 area is to the east, toward Morell Street, where sanitary sewer lines are located. Groundwater flow in this area appears to be affected by the sanitary sewer line system.

AREA D-2

Area D-2 is an SVOC- and hexavalent chromium-affected area in site IR-09, the Pickling and Plate Yard. Area D-2 is in the vicinity of buildings 422 and 423, which are on Hussey Street. Buildings 422 and 423, together, form a pickling and plate yard used for industrial metal finishing and painting. Acid and zinc-chromate-based corrosion-resistant primers in rinse water were wastes generated at these

buildings. The pickling and plate yard is considered to be the source for hexavalent chromium in this area. The source for SVOCs in this area is unknown.

Groundwater in the A-aquifer within the area is contaminated with SVOCs (at less than 83 $\mu\text{g}/\text{L}$), chromium (total) (at less than 395 $\mu\text{g}/\text{L}$), and hexavalent chromium (at less than 493 $\mu\text{g}/\text{L}$). The wells with the highest contaminant concentrations in this area are IR09PPY1 and IR09MW38A.

Groundwater in the A-aquifer in Area D-2 flows to the west.

AREA D-3

Area D-3 is a VOCs-affected area in site IR-36. Area D-3 is located around building 406, which was used in the 1950s for degreasing parts prior to packaging them for shipping. ASTs in building 406 were used for this purpose. An unknown amount of solvent was released to the environment and appears to have migrated to groundwater in this area.

Area D-3 is suspected to be a dense nonaqueous phase liquid (DNAPL) plume, which was delineated based on the analytical results for HydroPunch and grab groundwater samples. High levels of VOCs (DCE at 87,000 $\mu\text{g}/\text{L}$, vinyl chloride at 20,000 $\mu\text{g}/\text{L}$, and TCE at 180,000 $\mu\text{g}/\text{L}$) were detected in HydroPunch samples collected at HydroPunch borings within Area D-3. Tables B-5 and B-6 in Appendix B list the detected organic and inorganic results for groundwater samples collected from Parcel D.

AREA D-4

Area D-4 is a TPH-affected area in site IR-36. Area D-4 is in the southwestern region of IR-36, west of J Street, in a storage yard. Area D-4 extends into a region of Parcel D south of building 371, outside IR-36. The source of the TPH is unknown.

TPH-diesel (at less than 3,500 $\mu\text{g}/\text{L}$) and TPH-motor oil (at less than 21,000 $\mu\text{g}/\text{L}$) were detected in A-aquifer monitoring wells within the area. The well with the highest contaminant concentrations in this area is IR36MW23A.

Area D-4 is located in a groundwater depression (Figure 11). This depression may result from groundwater infiltration to the sanitary sewer system.

AREA D-5

Area D-5 is in site IR-39 and is affected by VOCs, SVOCs, and TPH-motor oil. Based on the HydroPunch samples (IR39B025 and IR39B026) collected north of IR-13 in Parcel E, this contaminant-affected area extends across the boundary between Parcels D and E into Parcel E (Figure 11). USTs HPA-14, HPA-15, S-711, S-712, S-713, S-714, and S-715 are within Area D-5. USTs HPA-14 and HPA-15 are 30-gallon steel USTs that held hydraulic fluid. The remaining USTs contained gasoline and diesel. All USTs have been removed (PRC 1994b). These USTs are considered to be the sources of contaminants in Area D-5.

VOCs (at less than 1,500 $\mu\text{g}/\text{L}$), SVOCs (at less than 220 $\mu\text{g}/\text{L}$), and TPH-motor oil (at less than 100 $\mu\text{g}/\text{L}$) were detected in A-aquifer monitoring wells within the area. The well with the highest contaminant concentrations in this area is IR39MW21A.

Similar to Area D-4, Area D-5 is located in a groundwater depression (Figure 11). This depression may result from groundwater infiltration to the sanitary sewer system.

2.8.4 Parcel E

Five contaminant-affected groundwater areas (E-1 through E-5) have been identified in Parcel E. The locations of these areas are shown on Figure 10. Table 7 lists the groundwater monitoring wells associated with these areas. Tables B-7 and B-8 in Appendix B list the detected results for organic and

inorganic analytes in groundwater samples collected from Parcel E. The location and constituents of each contaminant-affected area are described below.

AREA E-1

Area E-1, the largest contaminant-affected area in Parcel E, is affected by VOCs, SVOCs, PCB, TPH, and heavy metals. Area E-1 covers a large portion of site IR-1/21, following the outline of the bay in IR-1/21 and extending south to IR-02. Based on groundwater samples collected from the two monitoring wells (IR01MW02B and IR01MW03A) installed north of the HPA facility boundary, this contaminant-affected area also extends across the HPA facility boundary and into the adjacent formerly used defense sites (FUDS). Site IR-1/21 is an industrial landfill. Wastes disposed of in the industrial landfill include an estimated 235,000 tons of sandblast waste, 500 cubic yards of asbestos, 13,000 gallons of paint sludges, and 8,000 gallons of solvents and waste oils (NEESA 1984). IR-02 is a bay fill area. From 1945 to 1978, the south shoreline of HPA was used as a disposal site for sandblast waste, paint scrapings, and other debris. Wastes disposed of at site IR-02 by Triple A Machine Shop include waste oil containing PCBs, fluorescent radium dials and knobs, industrial debris, drums, paint cans, pipe lagging, and sandblast. The wastes disposed of at sites IR-1/21 and IR-02 are the sources of contaminants detected in Area E-1.

Contaminants affect groundwater in both the A-aquifer and the B-aquifer in this area. VOCs (at less than 170 µg/L), SVOCs (at less than 190 µg/L), PCBs (at less than 54 µg/L), TPH-diesel (at less than 5,200 µg/L), and TPH-gasoline (at less than 1,100 µg/L) were detected in A-aquifer monitoring wells within the area. The wells with the highest contaminant concentrations within this area are IR01MW18A, IR01MW43A, IR01MW58A, and IR01MWI-3. VOCs (at less than 36 µg/L), SVOCs (at less than 32 µg/L), PCBs (at less than 1.6 µg/L), TPH-diesel (at less than 1,200 µg/L), and TPH-gasoline (at less than 250 µg/L) were detected in groundwater collected in the A-aquifer well, IR01MW03A, located north of the HPA facility boundary.

SVOCs (naphthalene at 37 µg/L and bis[2-ethylhexyl]phthalate at 160 µg/L) were detected in B-aquifer wells within Area E-1. The well with the highest contaminant concentrations in the B-aquifer is IR01MW02B, located north of the HPA facility boundary. In addition to the organic contaminants detected in Area E-1, antimony, beryllium, cadmium, chromium, lead, mercury, and nickel were detected at concentrations above the MCLs in the A-aquifer monitoring wells, and antimony, chromium, and cadmium were detected at concentrations above the MCLs in the B-aquifer monitoring wells.

Groundwater in both the A-aquifer and the B-aquifer in Area E-1 flows to the south, toward the bay and to the east, toward Parcel D. Groundwater in the A-aquifer may be recharged vertically from the B-aquifer, since the groundwater level elevations in the B-aquifer are higher than those in the A-aquifer.

AREA E-2

Area E-2 is in sites IR-04, IR-12, IR-56, and IR-72 and is affected by VOCs, SVOCs, and TPH. Site IR-04 is a scrap yard. Site IR-12 is a disposal trench and salvage yard, which was used for storage of reusable surplus materials and stripping scrap metal from electrical cable, pipe lagging, and motor vehicles. Contaminant sources at IR-12 include oil and liquid chemicals that were spilled onto the ground; some of the liquid wastes apparently ran directly into a storm drain inlet in the salvage area (HLA 1993). Site IR-56 is the railroad yard and tracks southwest of Crisp Ave. Site IR-71 contains building 811 along with two USTs: USTs S-801 and S-802. USTs S-801 and S-802 were 10,000-gallon-capacity steel tanks containing gasoline. The two tanks were closed in place (PRC 1994b). The tanks are located in the approximate middle of the area, from a north-south orientation. The contaminant sources in Area E-2 may be USTs S-801 and S-802 and waste generated in buildings within the area.

VOCs (at less than 160 µg/L), SVOCs (at less than 210 µg/L), TPH-diesel (at less than 390,000 µg/L), and TPH-gasoline (at less than 10,000 µg/L) were detected in monitoring wells within the area. The

wells with the highest contaminant concentrations within this area are wells IR04MW13A and IR12MW21A. Well IR04MW13A had the highest VOC concentrations of wells within this area. Well IR12MW21A had the highest SVOC, TPH-diesel, and TPH-gasoline concentrations in the area.

Groundwater flow in the A-aquifer in Area E-2 is to the east, toward Parcel D.

AREA E-3

Area E-3 is a SVOC-affected area in site IR-13. Area E-3 is located at the western end of former building 524, which was the old commissary. The contaminant source for this area is unknown.

Only one monitoring well (IR13MW11A) is located within the area. The only contaminant detected above the detection limit in this area is bis(2-ethylhexyl)phthalate, at a concentration of 1,400 µg/L.

Groundwater in the A-aquifer in Area E-3 generally flows to the east and north, toward groundwater depressions in Parcel D (Figure 11).

AREA E-4

Area E-4 is in site IR-03 and is affected by VOCs, SVOCs, PCBs, and heavy metals. Site IR-03 consists of oil reclamation ponds that were used for disposal of oily wastes generated from ships and from other shipyard operations. The ponds were filled by the Navy in 1974. There is no indication that the underlying oily soil was treated or removed prior to filling. The oily wastes disposed of in the ponds are the source of contaminants detected in Area E-4.

VOCs (at less than 130 µg/L), SVOCs (at less than 220 µg/L), and PCBs (at less than 290 µg/L) were detected in A-aquifer monitoring wells within the area. In addition, antimony, arsenic, barium, chromium, lead, and thallium were detected at concentrations above the MCLs in the A-aquifer

monitoring wells within Area E-4. The wells with the highest contaminant concentrations within this area are IR03MW225A, IR03MW226A, and IR03MWO-1.

Groundwater in the A-aquifer in Area E-4 flows inland from the bay, toward Parcel D.

AREA E-5

Area E-5 is in sites IR-11, IR-14, and IR-15 and is affected by VOCs, SVOCs, and TPH. Site IR-11 is the area around building 521, a power plant; site IR-14 was an oily waste disposal area; and site IR-15 includes oily waste ponds, an incineration tank, and Triple A Site 12. The contaminant sources for Area E-5 are the wastes generated by the activities at sites IR-11, IR-14, and IR-15.

In this area, only groundwater in the A-aquifer is affected by contaminants. VOCs (at less than 38 $\mu\text{g/L}$), SVOCs (at less than 35 $\mu\text{g/L}$), pesticides (at less than 53 $\mu\text{g/L}$), TPH-diesel (at less than 280,000 $\mu\text{g/L}$), and TPH-gasoline (at less than 22,000 $\mu\text{g/L}$) were detected in A-aquifer monitoring wells. The wells with the highest contaminant concentrations within this area are IR11MW25A, IR11MW27A, IR14MW13A, and IR15MW08A.

Area E-5 is located in a groundwater mound in the A-aquifer. Groundwater in the A-aquifer in this area generally flows inland from the bay, toward Parcel D. This flow pattern is the result of groundwater infiltration to the sanitary sewer system, which is affected by pumping at Pump Station A, located in Parcel A.

3.0 GROUNDWATER MONITORING PROGRAM

This section describes the groundwater monitoring program at HPA, including the objectives and conceptual approach, selection of monitoring wells and analyses, future revisions to the monitoring plan, and monitoring results reporting.

3.1 GROUNDWATER MONITORING OBJECTIVES

As stated in Section 1.0, the objectives of the quarterly, semiannual, and annual groundwater monitoring to be implemented after the RI are to:

- Confirm that groundwater contamination plumes are not migrating, or if they are, to monitor the groundwater contamination plume migration rate
- Monitor groundwater level and hydraulic gradient changes that could influence contamination plume migration patterns
- Monitor concentration trends with groundwater contamination plumes over time to establish baseline conditions for future remedial actions

3.2 FACILITY-WIDE GROUNDWATER MONITORING APPROACH

The facility-wide groundwater monitoring approach at HPA consists of two components: groundwater level monitoring and chemical concentration monitoring. The following subsections describe the approaches for groundwater level and chemical concentration monitoring at HPA.

3.2.1 Groundwater Level Monitoring

Groundwater level measurement will be performed at all monitoring wells and piezometers at HPA every 3 months throughout the year for 1 year. Groundwater level measurements will provide data on fluctuations in water levels and changes in the magnitude and direction of groundwater flow. Figure 4 shows the locations of existing monitoring wells at HPA, with the exception of new wells installed after July 1995 under CLEAN II CTOs 0005 and 0011. Figure 4 will be updated when the survey information on the locations of newly installed wells becomes available. Groundwater level measurements will be performed according to the field procedures outlined in Section 4.0.

3.2.2 Groundwater Chemical Concentration Monitoring

Groundwater sampling and analysis will be performed at selected wells on a quarterly, semiannual, and annual basis. Quarterly monitoring will be performed every 3 months throughout the year for selected wells. Semiannual monitoring will be performed twice a year for selected wells, and annual monitoring will be performed once a year for selected wells. According to historical precipitation data for San Francisco, the wet season occurs in the winter (December to February), the dry season occurs in the fall (September to November), and the transitional season occurs in spring (March to May) and summer (June to August). For quarterly groundwater sampling, groundwater samples will be collected for each season (winter, spring, summer, and fall) to ascertain the chemical concentration variations during the wet, dry, and transitional seasons. For semiannual groundwater sampling, groundwater will be collected for the winter and fall (wet and dry) seasons to ascertain the chemical concentration variations between the wet and dry seasons. For annual groundwater sampling, the groundwater samples will be collected in late spring (May) or early summer (June) to reflect the expected average chemical concentrations in groundwater.

The selection of monitoring wells to be included in the quarterly, semiannual, and annual monitoring programs and the analytical program to be used, are discussed in Section 3.3.

3.3 SELECTION OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING

This section describes the selection of monitoring wells to be included and analyses to be performed for the groundwater monitoring program at HPA.

3.3.1 Selection of Monitoring Wells

The monitoring wells to be included in the monitoring program are selected according to the following criteria. These criteria are based on the guidance contained in the "Long-term Groundwater

"Monitoring Program Guidance" (CBCEC 1994) and hydrogeologic and groundwater contamination conditions at HPA.

- All newly installed monitoring wells will be sampled quarterly for one year. After one year of sampling, wells will be evaluated based on the decision tree shown on Figure 12 to determine the necessity for continuous sampling. New wells are being installed as part of the ongoing RI and DNAPLs study after July 1995.
- For existing wells (installed before July 1995), the representative upgradient, downgradient, and cross-gradient wells, and in-plume monitoring wells will be sampled. The frequency of sampling will be determined according to the decision tree shown on Figure 12. The number of upgradient, downgradient, cross-gradient and plume wells to be sampled will depend on the shapes, sizes, and migration rates of the plumes. At least one upgradient and one in-plume well, and between one and five downgradient wells will be sampled. The in-plume wells to be sampled are those wells with the highest concentrations of contaminants detected in the plume.
- All in-plume bedrock monitoring wells will be sampled because of the uncertainty of hydraulic connection between these wells. The frequency of sampling will be determined based on the decision tree shown on Figure 12.
- The monitoring wells that are located in the groundwater depressions, which may be caused by groundwater infiltrating to the sanitary sewer systems, will be sampled. The frequency of sampling will be determined based on the decision tree shown on Figure 12.

The existing monitoring wells (installed before July 1995) were evaluated based on the above selection criteria, and a total of 132 existing wells were selected to be included in the monitoring program.

Table 8 lists the selected monitoring wells and their sampling frequencies. This list will be revised to include all monitoring wells installed after July 1995 before implementing the facility-wide groundwater monitoring program at HPA. This list will be reevaluated and updated if the boundaries of groundwater contaminant-affected areas change due to information from (1) the groundwater monitoring program, (2) the ongoing RI, and (3) the remediation measures taken at a site. The list will also be reevaluated and updated after each parcel's RI, FS, and record of decision (ROD) are completed. The rationale used to select or reject each monitoring well for sampling is presented in Tables 9 through 12.

3.3.2 Analytical Program

The analyses to be performed will be determined based on the following criteria:

- Groundwater samples that are associated with known groundwater plumes will be analyzed for the known organic contaminants that have been detected in the plume and the inorganic contaminants that have been detected at concentrations above the MCLs in previous sampling.
- Groundwater samples collected from newly installed monitoring wells that are associated with surface spills or other potential historic releases of hazardous materials and are located in an area where groundwater contamination has not been fully characterized will be analyzed for all potential contaminants.
- Groundwater samples collected from TPH-gasoline affected areas will also be analyzed for methyl tertiary butyl ether (MTBE).

The analytical program for selected existing monitoring wells is listed in Table 8.

VOCs (including MTBE), SVOCs, pesticides/PCBs, and metals will be analyzed using the U.S. Environmental Protection Agency (EPA) Contract Laboratory Program (CLP) methods. TPH-gasoline and TPH-diesel will be analyzed using the methods described in the "Leaking Underground Fuel Tank Field Manual" (LUFT method) (State of California Water Resources Control Board [SWRCB] 1989). Hexavalent chromium analysis will be performed using EPA Method 7196.

3.4 FUTURE REVISIONS TO MONITORING PLAN

The list of monitoring wells in the groundwater monitoring program will be reviewed and updated annually, and the results will be presented in the annual report described below in Section 3.5.2. The criteria for updating the well list are listed below.

- After 1 year of quarterly monitoring, the newly installed wells will be evaluated to determine the sampling frequency, based on the decision tree shown on Figure 12.
- All groundwater monitoring wells included in the monitoring program will be reevaluated annually based on the sampling results and conclusions from removal actions, RI, FS, and ROD, if applicable. If the results show that a given area of contaminant-affected groundwater is not migrating after 1 year of sampling, monitoring of the upgradient and cross-gradient wells for that area will be discontinued. The representative downgradient wells will be sampled annually except those on the bay front, which will be sampled semiannually. If a given area is migrating, the relationship of the monitoring wells to the area will be redefined based on the new boundaries of the contaminant-affected area delineated by the last round of sampling results. The frequency of sampling for these wells will be determined based on the decision tree on Figure 12.
- If after 5 years of monitoring, a particular groundwater contaminant-affected area has not migrated and contaminant concentrations have not been significantly increased, then only bay-front downgradient wells will be monitored on an annual basis. An increase in contaminant concentration will be considered significant if the concentration is greater than half an order of magnitude of the lowest detected concentration of this contaminant in the groundwater samples collected from the well.

The criteria for updating the list of selected monitoring wells to be included in the facility-wide monitoring program will be revised to incorporate the groundwater monitoring needs associated with the remedies chosen in the RODs for each parcel, once the RODs are completed.

3.5 MONITORING RESULTS REPORTING

Quarterly and annual reports will be prepared to present the results of quarterly, semiannual, and annual groundwater monitoring. The following sections detail the contents of the quarterly and annual reports.

3.5.1 Quarterly Report

Quarterly monitoring reports will be prepared for each round of quarterly monitoring. The results of the semiannual monitoring program will be included in the quarterly reports for those quarters in which

semiannual monitoring is conducted along with the quarterly monitoring. The results of the annual monitoring program will be included in the quarterly reports for those quarters in which annual monitoring is conducted along with the quarterly monitoring. Each report will include the following information:

- Tabulated groundwater levels for all wells monitored during the monitoring period
- Tabulated detected analytical results for all wells monitored
- Water level contour maps for each aquifer where appropriate
- Analyte distribution or plume maps, where possible, for each target analyte (for example, TCE) or for analyte groups (for example, VOCs) for each aquifer
- Description of deviations from the Quality Assurance Project Plan (QAPjP)(PRC 1995b) and/or this monitoring plan, as appropriate
- Recommendations for new monitoring wells and/or well abandonment, if necessary
- Copies of chain of custody forms

Cursory and full validation qualifiers will be assigned to all analytical results in accordance with the QAPjP (PRC 1995b).

3.5.2 Annual Report

Annual reports will be prepared to evaluate and summarize quarterly, semiannual, and annual monitoring results for each year. An annual report will include a detailed evaluation and discussion of the analytical data and results of the past four quarters, a discussion of anomalous data, and evaluation and discussion of site-wide hydrogeologic data and remediation system(s). The annual monitoring report will also assess the extent of contamination of groundwater at HPA, determine the rate of movement for plumes that are migrating, evaluate general relationships between groundwater quality and sources of contamination, evaluate seasonal variation in groundwater levels and chemical concentrations, assess changes in contaminant migration pathways, evaluate and update the list of

monitoring wells to be sampled for the future monitoring, and evaluate and update the list of monitoring wells to be abandoned and replaced, if applicable.

At a minimum, the report will meet the following objectives:

- Evaluate the groundwater quality data obtained during the past year to identify significant trends, if any
- Assess any seasonal changes in water levels and water quality or quantity from monitoring conducted during previous Investigations
- Evaluate the levels of contamination in all water-bearing units at HPA
- Assess any changes in contaminant plumes or migration pathways
- Describe any deviations from the QAPjP or this monitoring plan
- Discuss any changes in the hydrogeologic conceptual model and update cross sections based on well logs from new wells or borings
- Evaluate and discuss groundwater remediation systems, if applicable, such as
 - The effectiveness of plume capture by the existing system(s)
 - Modifications to pumping regimes, if necessary, including the addition of new wells to maintain hydraulic control
 - Effectiveness of remediation systems, supported by graphs and tabular summaries
- Identify data gaps and potential deficiencies in the monitoring system or reporting program based on the above data
- Conceptually assess groundwater, surface water, and utility (such as, storm drain or sewer system) interactions
- Discuss analytical data quality
- Present an updated list of monitoring wells to be sampled
- Present a list of monitoring wells to be abandoned and replaced, if applicable

4.0 FIELD PROCEDURES

The following sections briefly discuss the procedures for groundwater level measurement and groundwater sample collection to be followed for the groundwater monitoring program at HPA. Appendix C presents the detailed procedures for collecting groundwater and DNAPL samples. All field activities will be conducted according to the procedures described in the QAPjP (1995b), the Health and Safety Plan for groundwater monitoring program at HPA (to be prepared), and PRC's standard operating procedures (SOP). Deviations from the QAPjP, HASP, SOPs, and/or this monitoring plan will be recorded and described in the appropriate quarterly or annual reports.

4.1 GROUNDWATER LEVEL MONITORING

The methods presented below are intended to ensure that groundwater level measurements are consistent and reproducible when performed by various individuals.

Measurements for each monitoring event shall be taken synoptically (within 10 hours) to construct quarterly, facility-wide groundwater level maps for each aquifer, if appropriate. To evaluate groundwater levels near the shore line for tidal impacts, tidal levels will be measured continuously offshore at Parcels B through E, and selected monitoring wells located near the shoreline will be monitored continuously for a suitable tidal cycle immediately prior to, during, and immediately after the synoptic water level measurements.

Groundwater levels will be measured three times in each monitoring well, using an electrical sounder. The average value of the three measurements will be used for groundwater level contouring. Calibration checks of electrical sounders will be made before each day's work. Portions of the cable that are submerged below the groundwater levels in wells will be cleaned according to the procedure described below in Section 4.4. Sounders will be maintained in a clean and functional condition.

4.2

GROUNDWATER SAMPLING PROCEDURES

The general procedures for collecting groundwater and DNAPL samples are presented below.

Appendix C presents detailed procedures for collecting groundwater and DNAPL samples.

Groundwater samples, with the exception of those for DNAPLs analyses, will be collected using the following the procedures:

- Field measuring and sampling equipment will be decontaminated prior to sample collection from each well.
- Water levels will be measured and purge volume calculated.
- Prior to sampling, a submersible pump or disposable bailer will be used for purging a minimum of three casing volumes from each well.
- Indicator parameters (temperature, conductivity, turbidity, and pH) will be monitored during purging to verify complete purging of static water in the well.
- If a well is purged dry before three casing volumes have been removed, the sample will be taken after the well has recovered to within 80 percent of the water level above the bottom of the well prior to purging or after 3 hours, whichever comes first. However, samples to be analyzed for VOCs will be obtained as soon as there is enough water in the well to collect the sample.
- Water samples will be collected with a disposable Teflon bailer or from a submersible bladder pump or equivalent.
- Samples analyzed for dissolved metals will be filtered in the field using a 0.45 micron membrane filter prior to filling sampling containers. The samples will be preserved with nitric acid immediately after filtering. Samples to be analyzed for total metals will not be filtered.
- Other sample containers will be filled directly from the bailer (by the stopcock) or pump discharge line. Sample containers, holding times, and preservation methods are specified in Table 13.

Subsurface water samples where DNAPLs are suspected will be collected using the following procedures:

- Field measuring and sampling equipment will be decontaminated prior to sample collection from each well.
- Water levels will be measured.
- Samples will be obtained from the bottom of the well using a peristaltic pump, and collected in polypropylene containers.
- Samples will be visually inspected for DNAPLs. A hydrophobic dye will then be added to the water sample. An estimate of the observed concentration of DNAPLs will be made in the field.
- Samples for VOC analyses will then be collected prior to purging the well water.

Sample designation, shipping, and chain of custody procedures are described in the QAPjP (PRC 1995b).

4.3 WELL MAINTENANCE AND ABANDONMENT

Groundwater monitoring wells will be inspected during sampling and water level measurement events. These inspections will determine whether maintenance activities are required. Maintenance activities include:

- Replacement or repair of damaged or corroded well caps, combination locks, steel well covers, and Christy boxes
- Abandonment and replacement of monitoring wells damaged beyond repair
- Abandonment of monitoring wells that are redundant or are no longer used for monitoring

Well replacement will be performed in accordance with the well installation procedures described in the QAPjP (PRC 1995b).

Monitoring wells will be abandoned according to the following procedures:

- The total depth of the well will be measured and recorded.
- The well will be drilled out using a hollow-stem auger. If a hollow-stem auger is inadequate for abandoning a well, an air rotary or other drilling method will be used.
- The bottom of the hole will be sounded after the polyvinyl chloride well casing and well completion materials (filter pack/cement seals) are removed to determine if the well materials have been completely drilled out.
- A hollow-stem auger will be kept in the hole until grouting commences. A tremie pipe will be placed to within 6 inches of the bottom of the hole. Grout consisting of neat cement with 5 percent bentonite will be pumped through the tremie pipe from the bottom of the hole to the ground surface. The volume of grout pumped into the hole will be compared to the volume of the hole to verify that the hole did not collapse during abandonment.
- The grouted hole will be checked for grout settlement. If settlement has occurred, more grout will be added.
- The well materials and drilling fluids, if required, removed from the boring will be disposed of as described in the QAPjP (PRC 1995b).

4.4 DECONTAMINATION PROCEDURES

All equipment that may be potentially contaminated during the groundwater level measurement and groundwater sampling will be decontaminated before and after use. Decontamination consists of steam cleaning (high pressure, hot water washing) or phosphate-free detergent wash, and distilled, deionized, or clean water rinse as appropriate. Sampling equipment will be decontaminated as follows:

- The exterior surfaces and accessible interior of submersible, centrifugal, and positive-displacement pumps will be steam cleaned prior to each use or prior to each sampling round.
- The used, disposable bailers and rope or string that have been in contact with the water in the well will be disposed of using the method described in the QAPjP (PRC 1995b).
- Well sounders, transducers, and water quality probes will be rinsed in distilled-deionized water and wiped clean after each use. Probes and tapes that come into contact with groundwater will be decontaminated according to previous discussion; all tape in contact with water will be rinsed.

4.5 QA/QC PROCEDURES

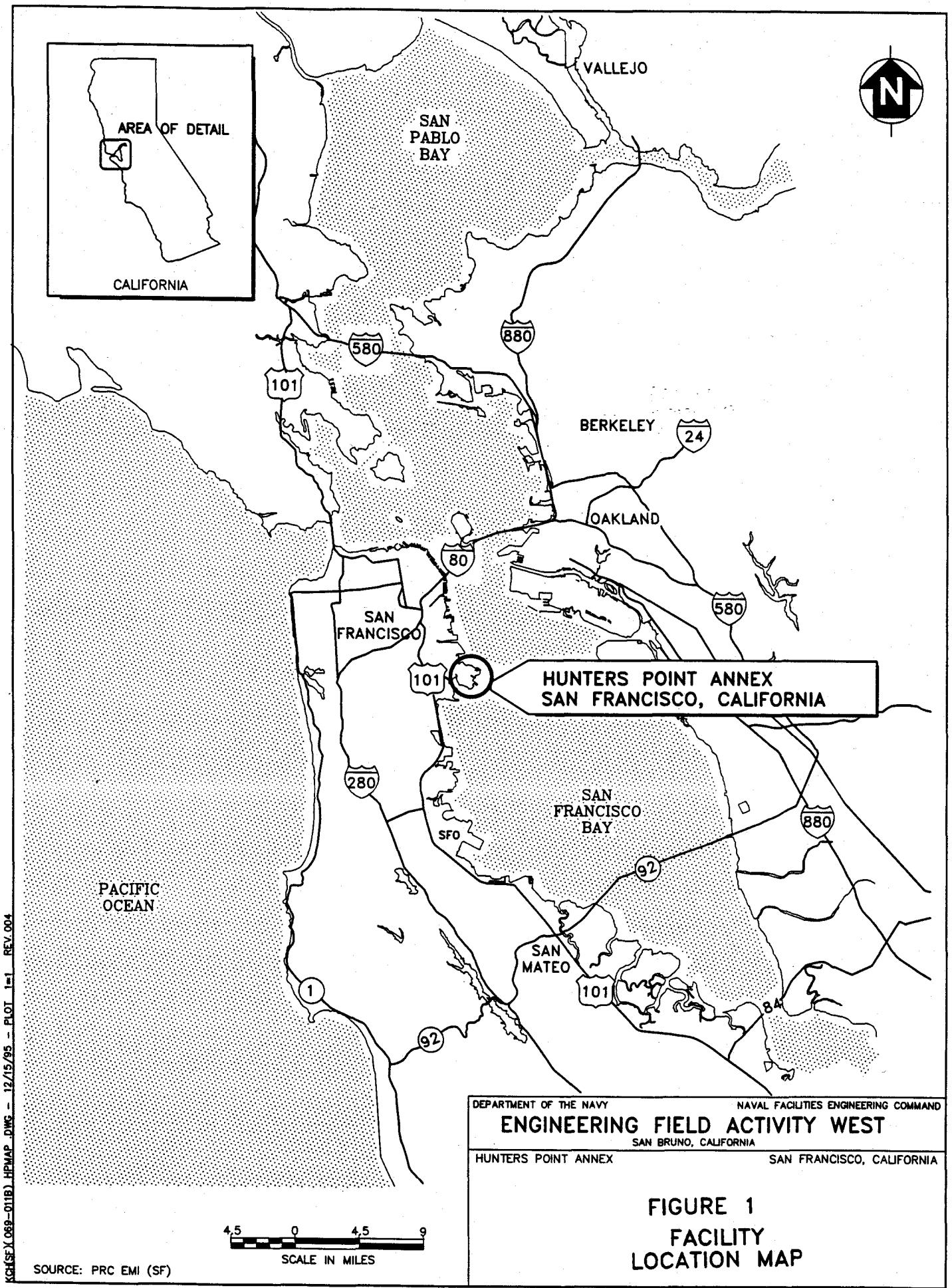
Quality assurance and quality control (QA/QC) procedures followed during quarterly, semiannual, and annual groundwater monitoring will include calibration of field and laboratory equipment (including equipment used for field measurements of pH, temperature, turbidity, and electrical conductivity); data reduction, validation, and reporting; and analysis of field and laboratory QA/QC samples as described in the QAPjP (PRC 1995b). Sample container, holding time, and preservation requirements for groundwater samples are summarized in Table 13. The sample custody procedures defined in the QAPjP (PRC 1995b) will be followed.

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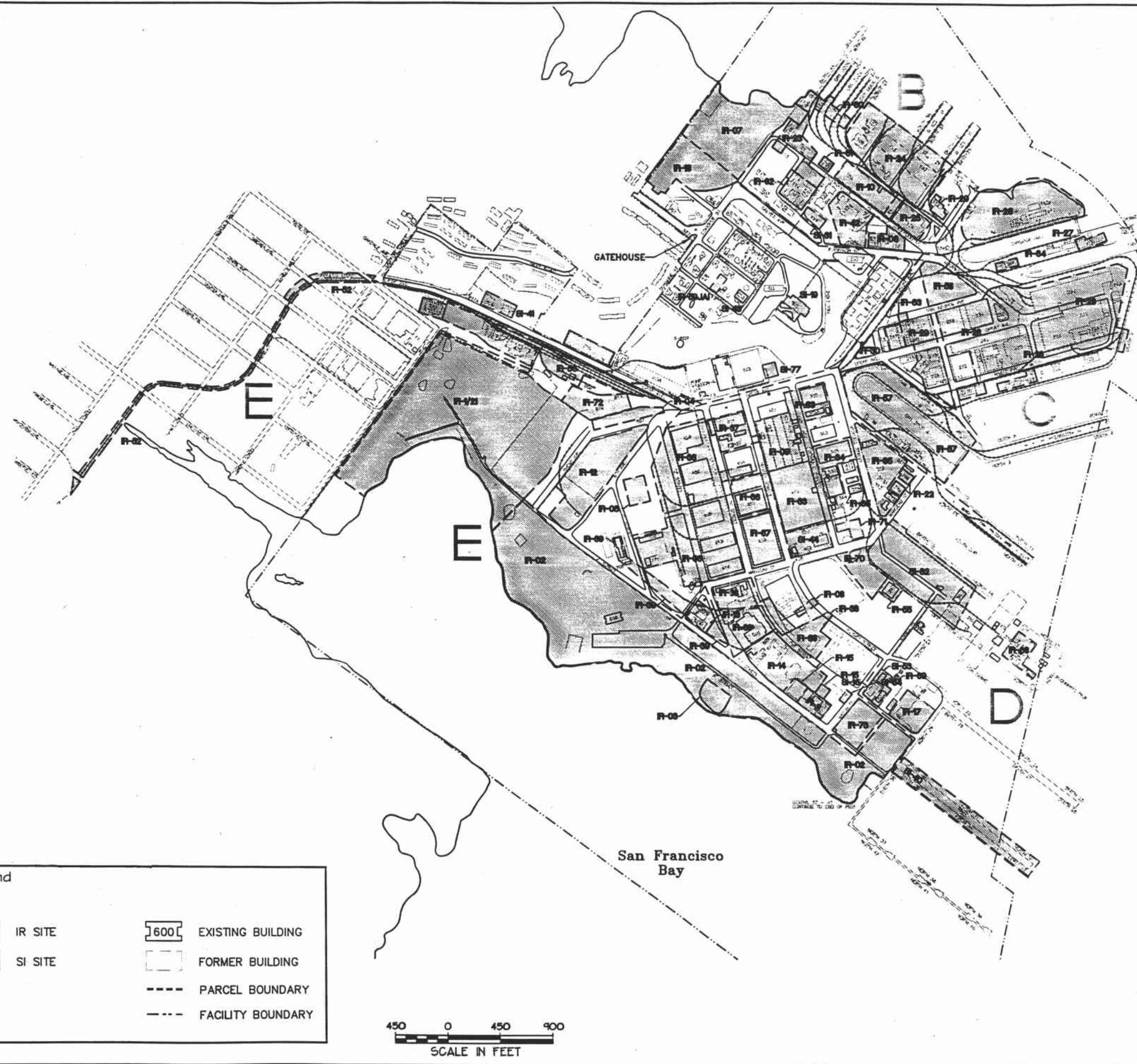
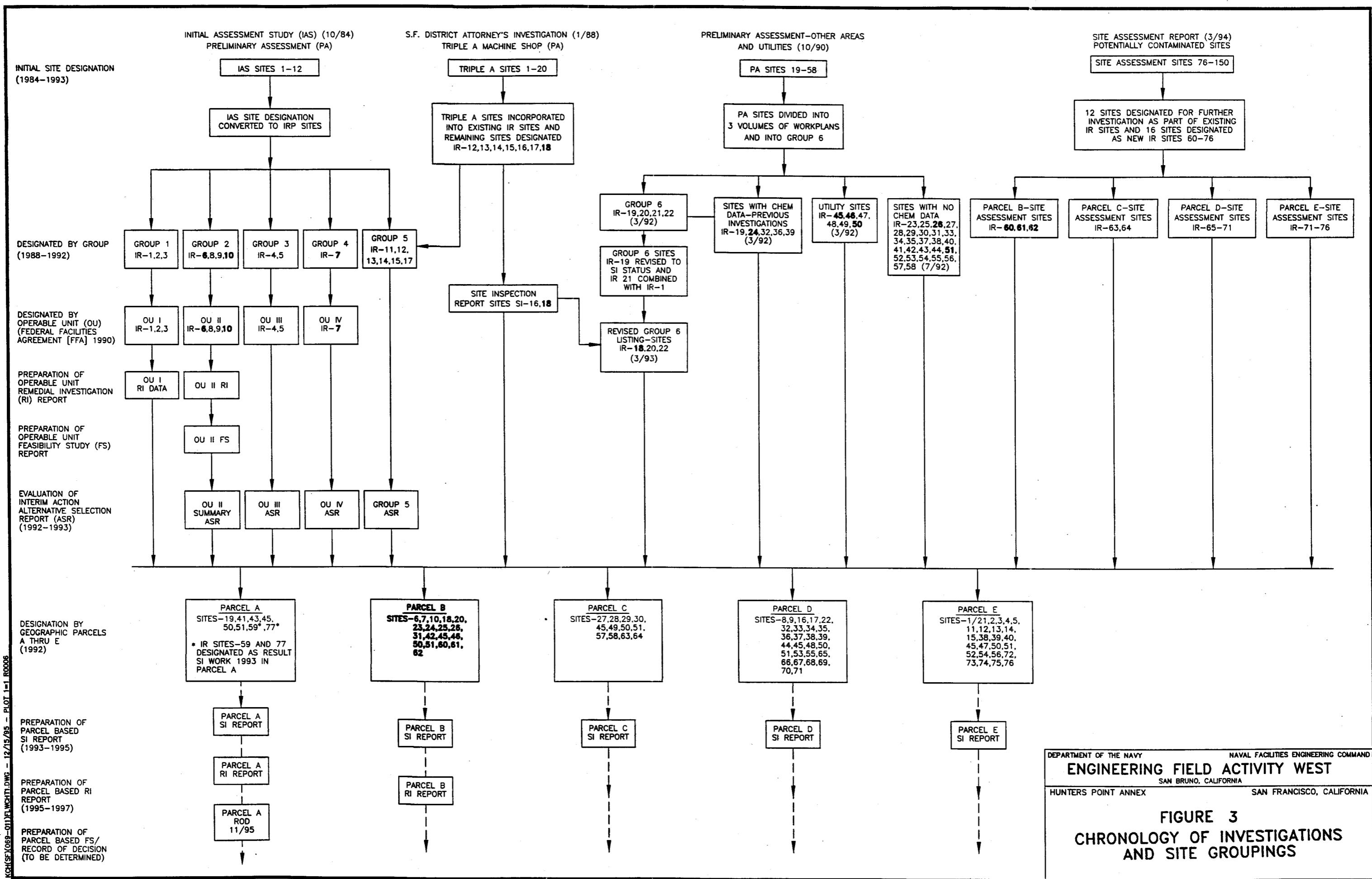
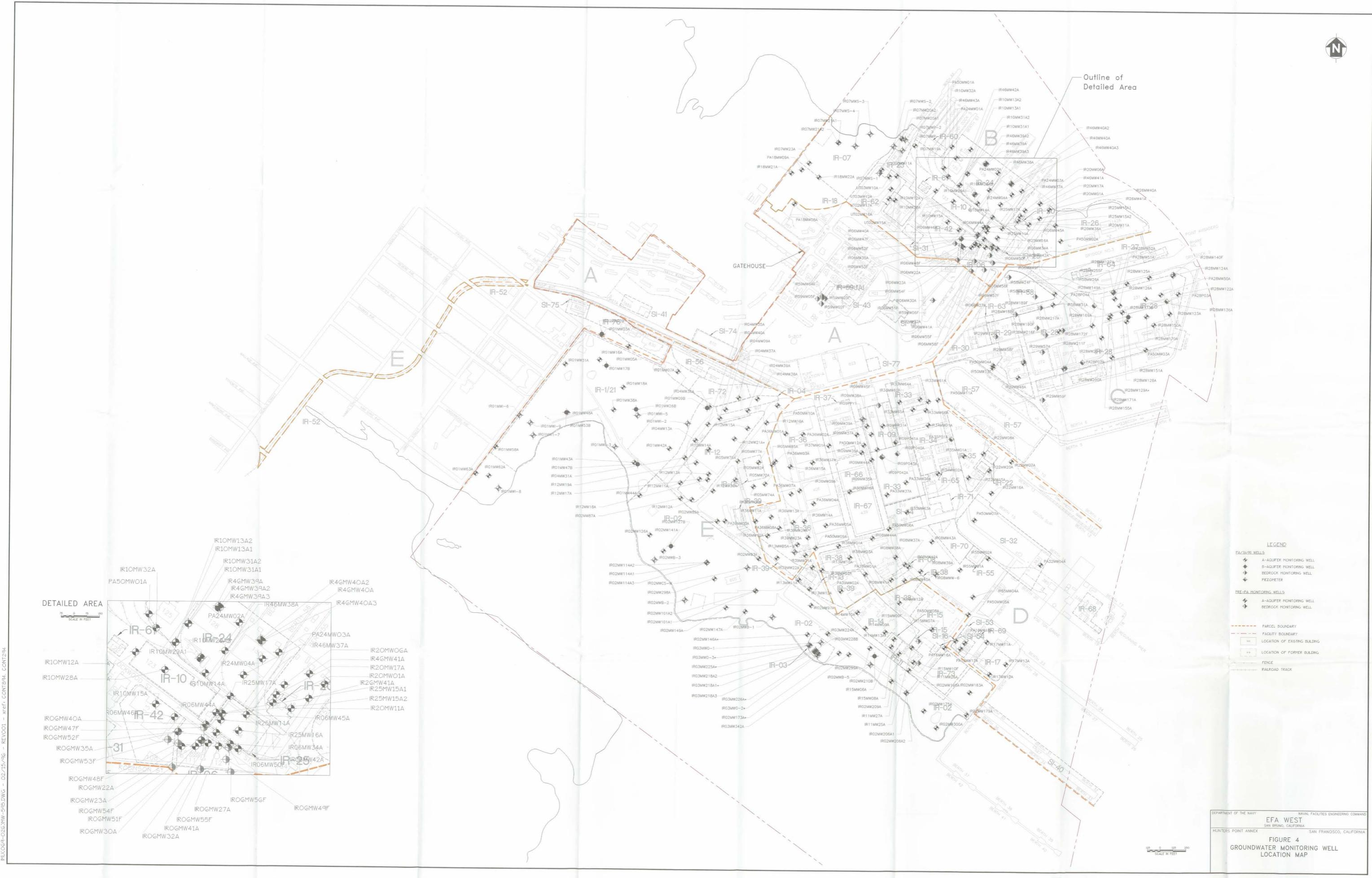


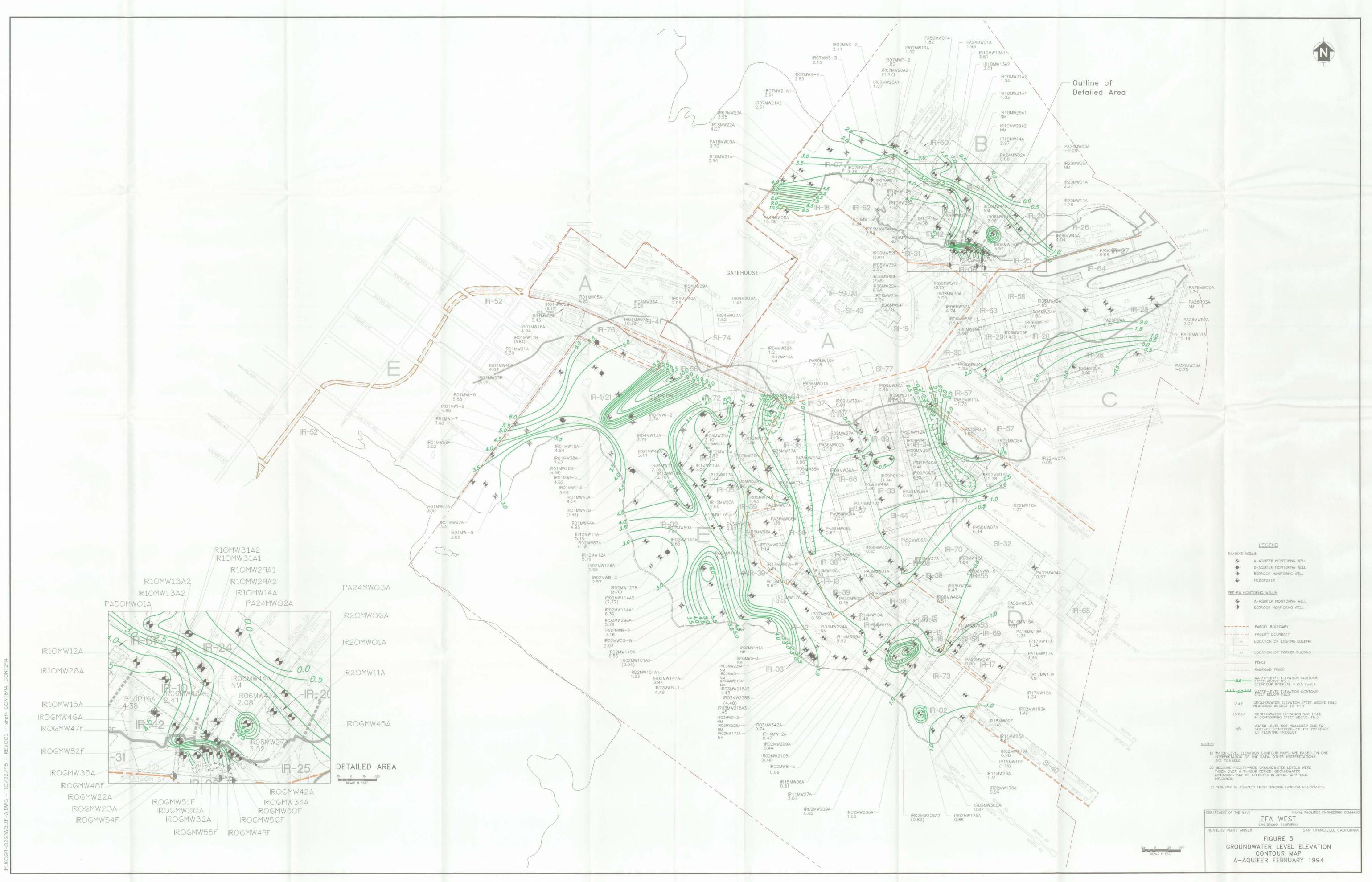
FIGURE 2
FACILITY MAP

DEPARTMENT OF THE NAVY **NAVAL FACILITIES ENGINEERING COMMAND**
ENGINEERING FIELD ACTIVITY WEST
SAN BRUNO, CALIFORNIA

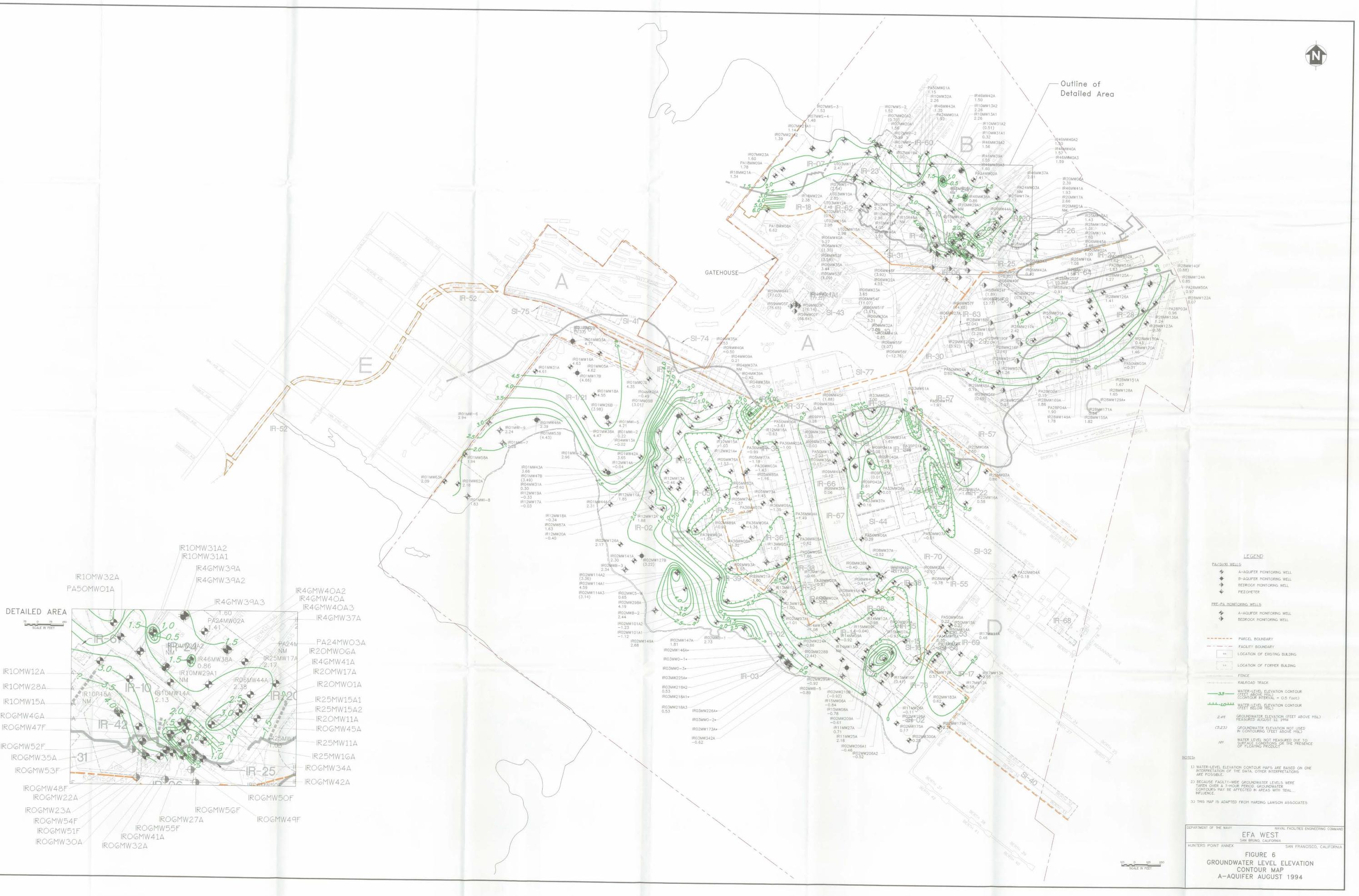
HUNTERS POINT ANNE



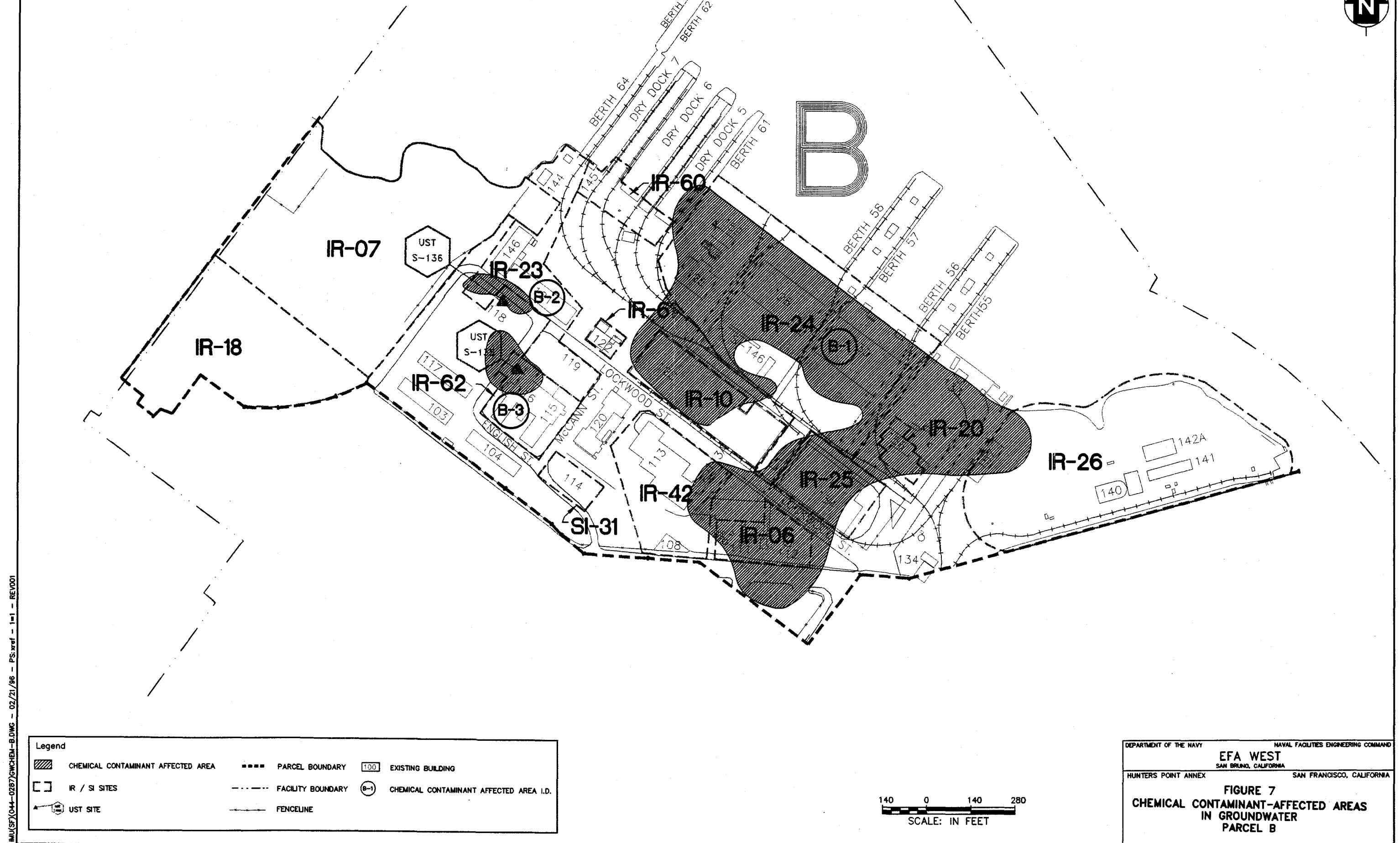


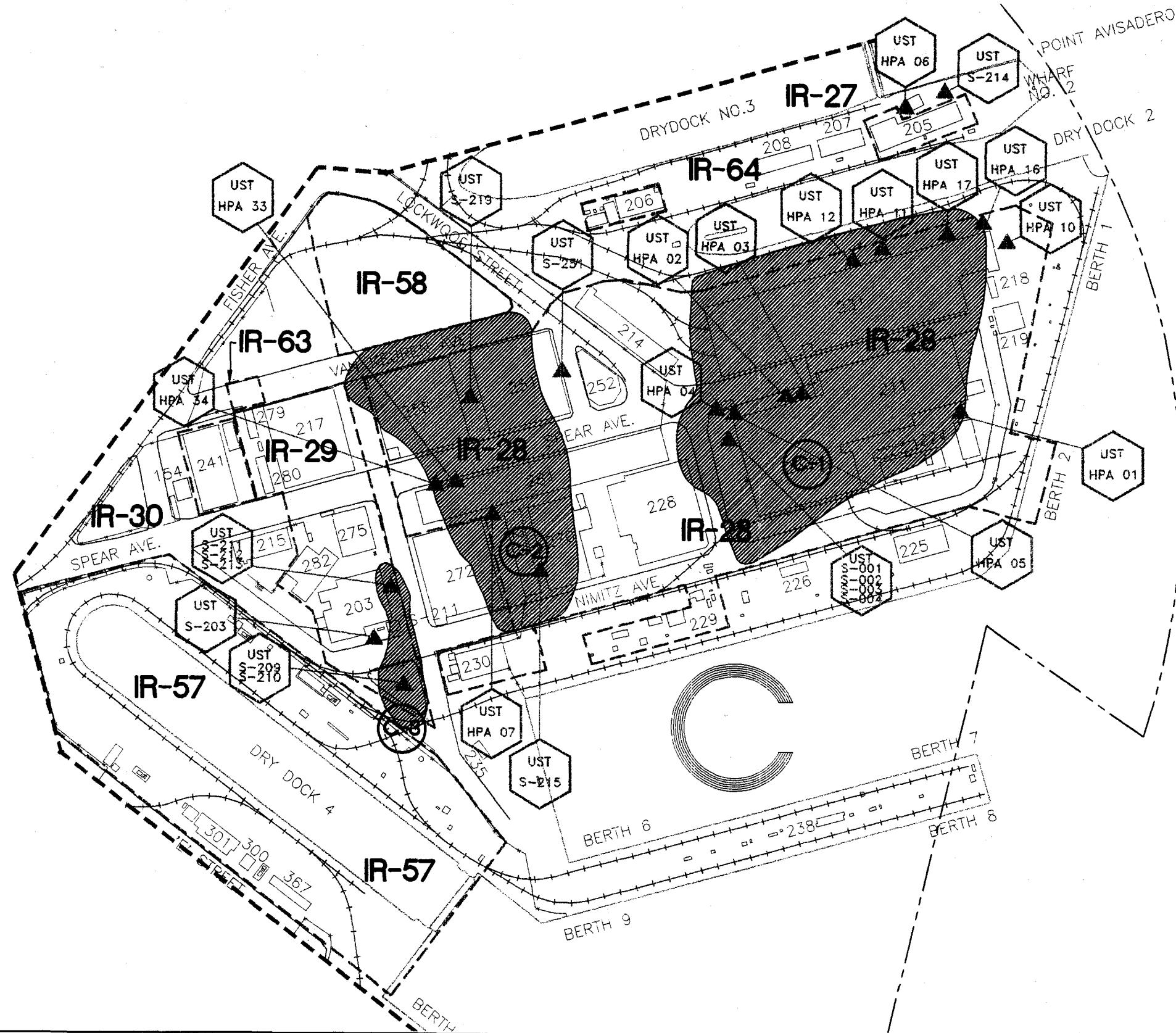


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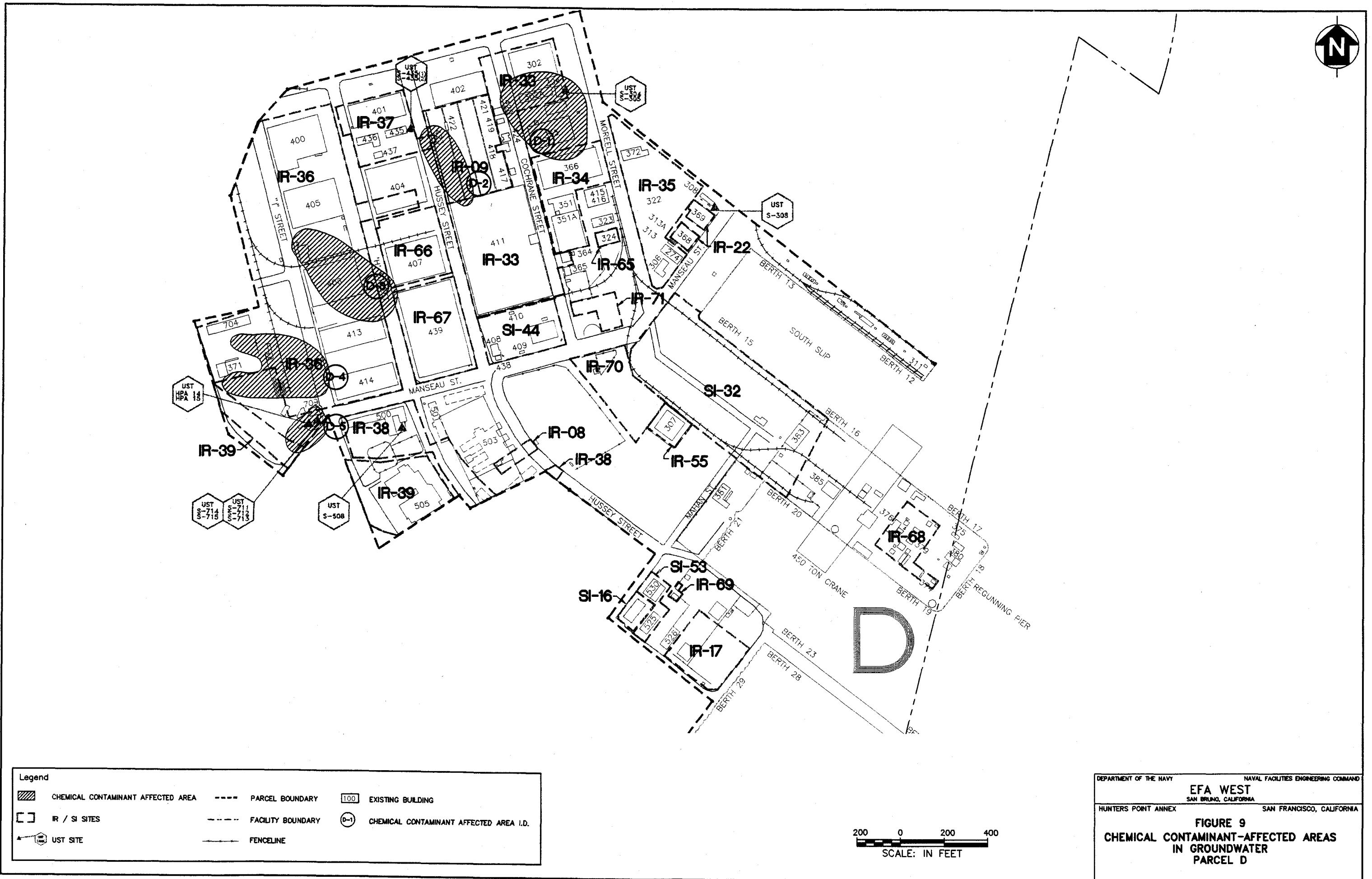


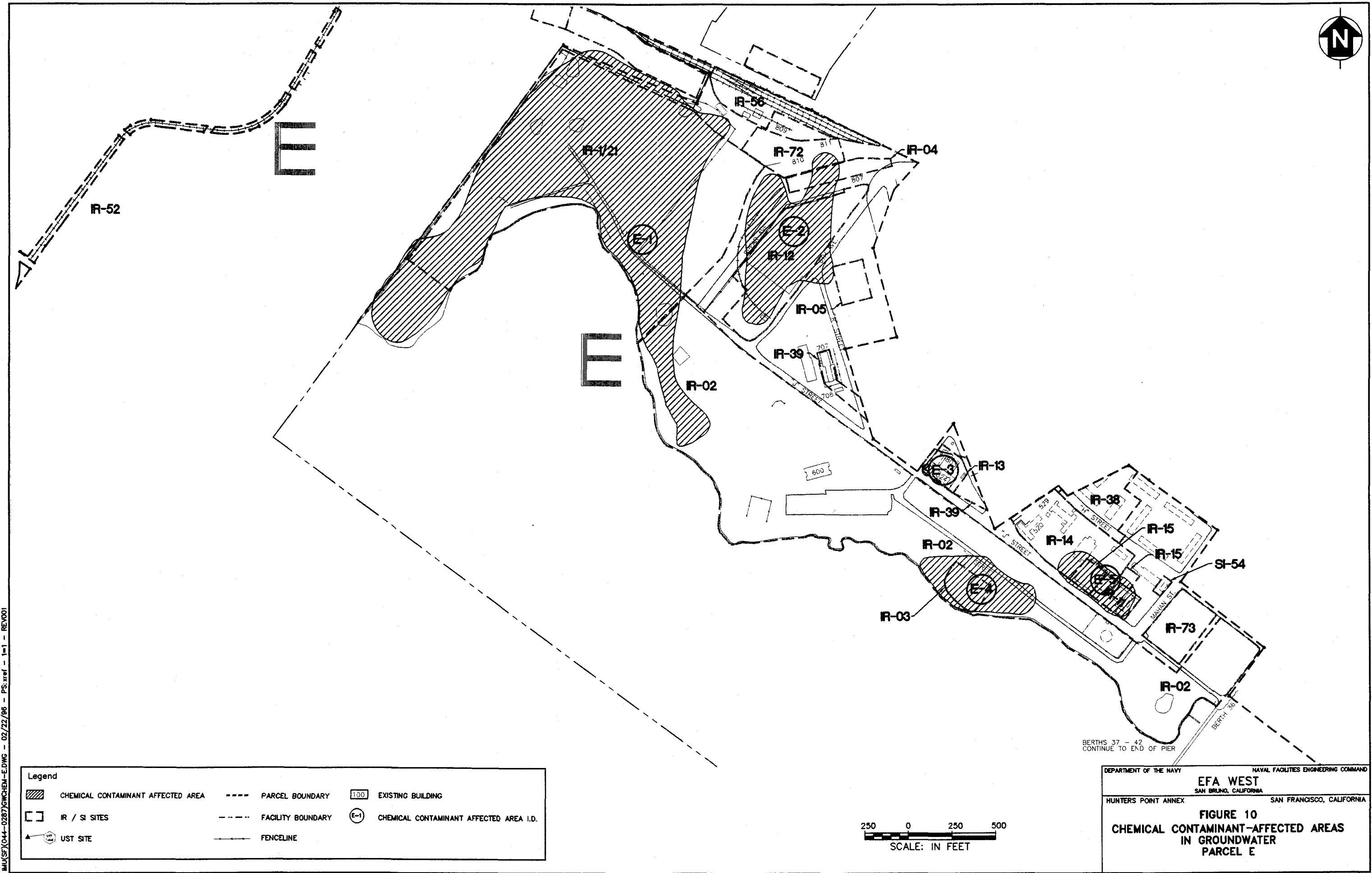
Legend

■ CHEMICAL CONTAMINANT AFFECTED AREA	---- PARCEL BOUNDARY	100 EXISTING BUILDING
□ IR / SI SITES	----- FACILITY BOUNDARY	(C) CHEMICAL CONTAMINANT AFFECTED AREA I.D.
▲ UST SITE	— FENCELINE	

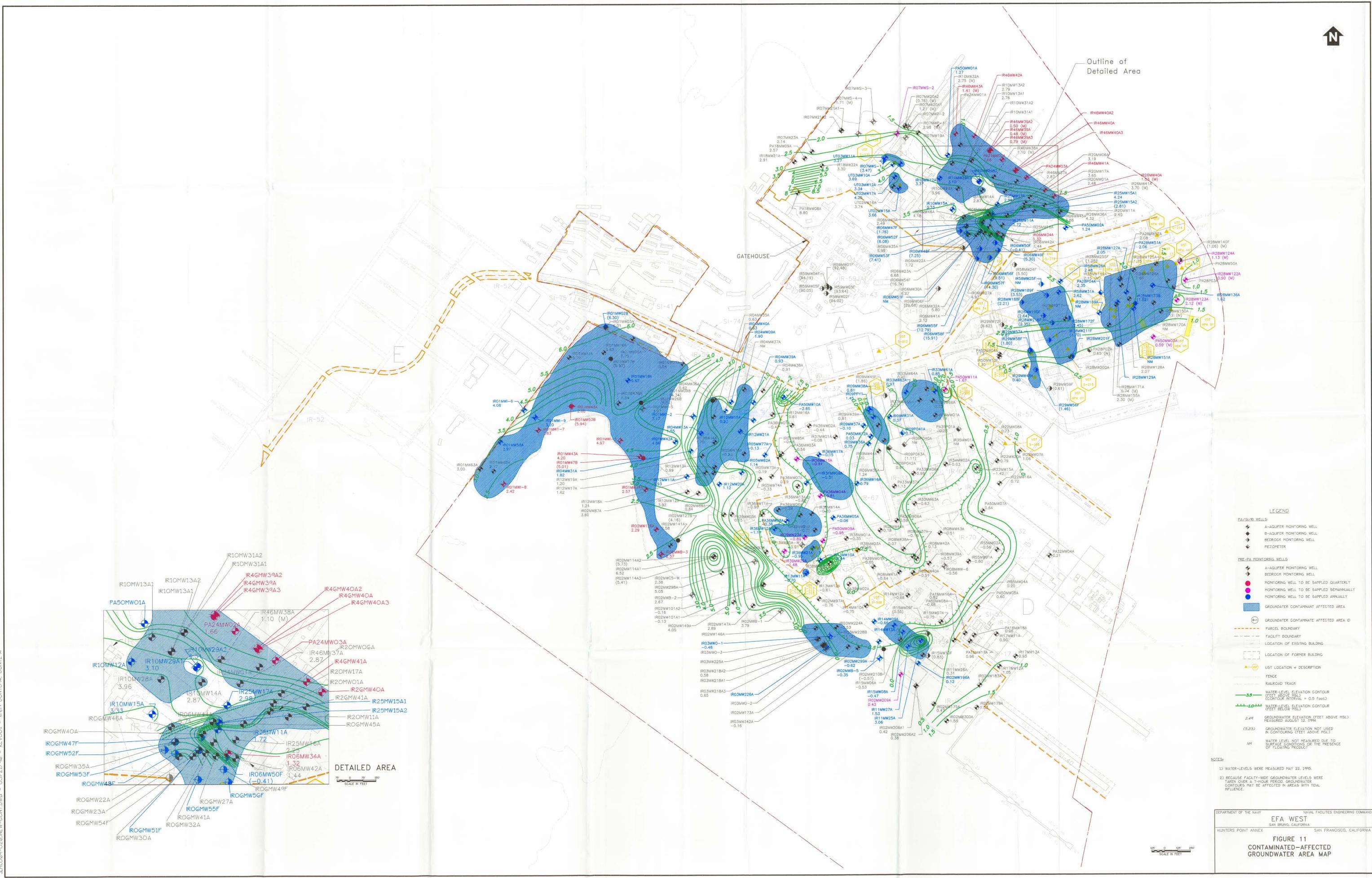
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SCALE: IN FEET

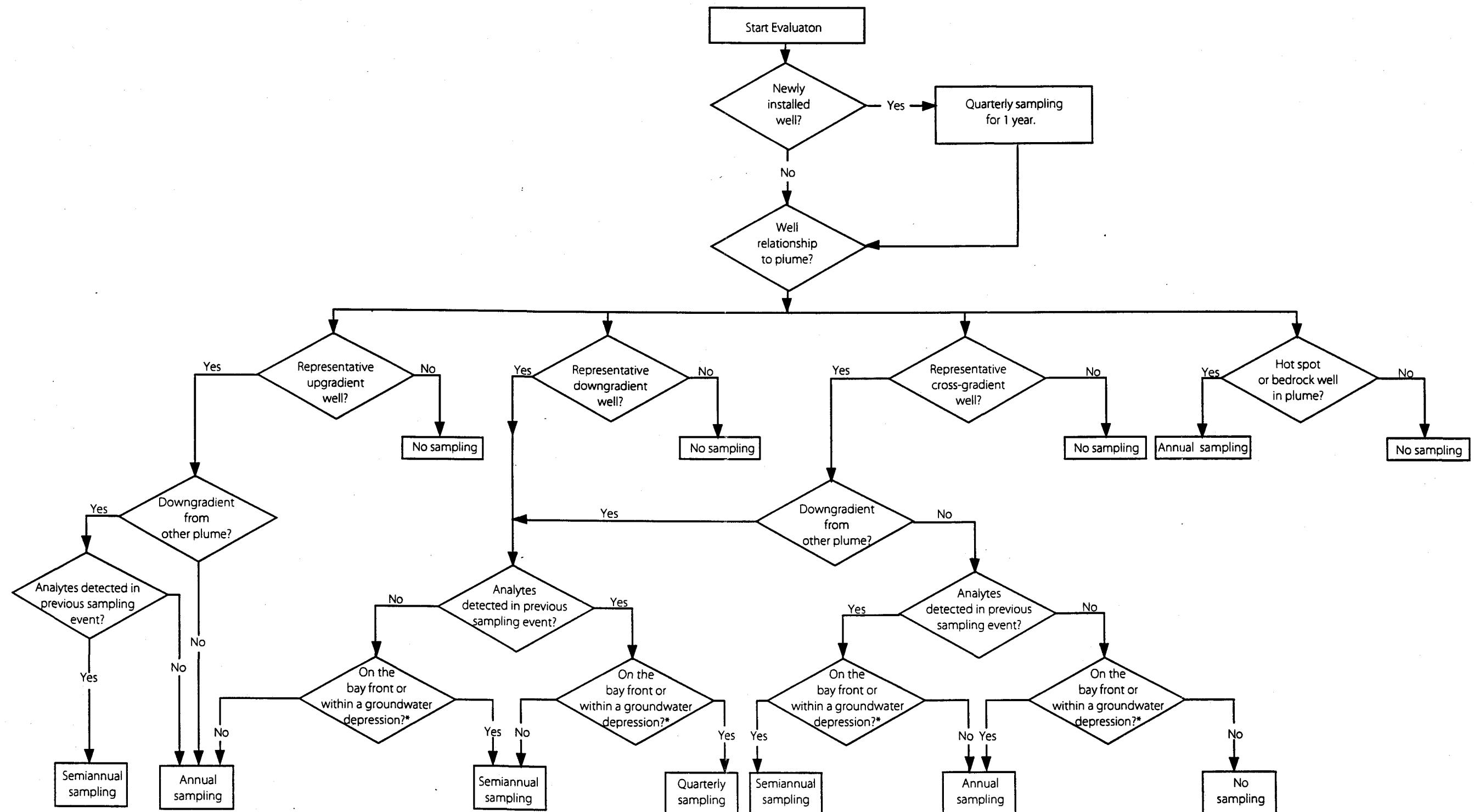
DEPARTMENT OF THE NAVY
EFA WEST
SAN BRUNO, CALIFORNIA
NAVAL FACILITIES ENGINEERING COMMAND
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA
FIGURE 8
CHEMICAL CONTAMINANT-AFFECTED AREAS
IN GROUNDWATER
PARCEL C





N





* Within a groundwater depression that may be caused by groundwater infiltrating to the sanitary sewer system

FIGURE 12
GROUNDWATER MONITORING
FREQUENCY DECISION TREE

TABLES

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TABLE 1

LIST OF IR AND SI SITES^a
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
A	SI-19 ^c	Building 901 (Officers' Club)	NA	NA	NA
A	SI-41 ^c	Building 816 (Naval Radiological Defense Lab) and Building 818 (Chlorinating Plant)	NA	NA	NA
A	SI-43 ^c	Building 906 (Gardening Tool House)	NA	NA	NA
A	SI-45 ^c	Steamlines (Utility Investigation)	NA	NA	NA
A	SI-50 ^c	Storm Drains and Sanitary Sewer Lines (Utility Investigation)	NA	NA	NA
A	SI-51 ^c	Former Transformer Site	NA	NA	NA
A	IR-59	Parcel A Groundwater Investigation	NA	NA	NA
A	SI-77 ^c	Note: Site is located within general area of IR-59 - UST Site	NA	Tank S-812 at Building 813	NA
B	IR-06	Buildings 111(d), 112(d) and Tank Farm	NA	NA	NA
B	IR-07	Sub-base Area	NA	NA	NA
B	IR-10	Building 123 (Battery and Electroplating Shop)	NA	NA	NA
B	IR-18	Waste Oil Disposal Area behind Dago Mary's Restaurant	NA	NA	NA
B	IR-20	Building 156 (Rubber Shop)	NA	NA	NA
B	IR-23	Building 146 (TACAN Facility), Building 161(d) (Maintenance Service), and Building 162(d) (Paint Storage)	No. 77 - Building 145 ^c (Saltwater Pump House)	Tank S-136 at Building 118	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^c	Underground Storage Tank Site	Radiation Site ^b
B	IR-24	Building 124(d) (Acid Mixing Plant), Building 125 (Submarine Cafeteria), and Buildings 128 and 130 (Machine Shops)	NA	NA	NA
B	IR-25	Building 134 (Machine Shop)	NA	NA	NA
B	IR-26	Building 157 (Nondestructive Testing Lab) and Area XIV (Area North of Dry Dock 3)	NA	NA	NA
B	SI-31 ^c	Building 114 (Offices)	NA	NA	NA
B	IR-42	Building 109 (Police Station) and Buildings 113 and 113A (Tug Maintenance)	NA	NA	NA
B	SI-45 ^c	Steamlines (Utility Investigation)	NA	NA	NA
B	IR-46	Fuel Distribution Lines and Tank Farm (Utility Investigation)	NA	NA	NA
B	IR-50	Storm Drains and Sanitary Sewer Lines (Utility Investigation)	NA	NA	NA
B	IR-51	Former Transformer Site	NA	NA	NA
B	IR-60	NA	No. 76 - Dry Docks 5, 6, and 7 ^e	NA	NA
B	IR-61	NA	No. 79 - Building 122 ^e (Substation V)	NA	NA
B	IR-62	NA	No. 82 - Buildings 115 and 116 ^e (Training)	Tank S-135 at Building 116	NA
C	IR-27	Building 205 (Pump and Compressor Plant)	NA	Tanks HPA-06 and S-214 at Building 205	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
C	IR-28	Building 211 and 253 (Electric Shop), Building 219 (Substation E), Building 230 (Shop Service), Building 231 (Machine Shop), Building 258 (Pipefitters Shop), Buildings 270 and 271 (Paint Shop and Annex), Building 281 (Electronic Weapons), and Berth No. 2	No. 94 - Building 251 (Industrial Relations) No. 99 - Building 230 No. 100 - Building 281 No. 101 - Building 273 (Substation GH-2) No. 102 - Building 270 No. 103 - Building 271 No. 111 - Building 229 (Substation L)	Tank HPA-01 at Building 211 Tank S-219 and S-251 at Building 251 Tanks HPA-02, HPA-03, HPA-04, HPA-05 and S-001, S-002, S-003, S-004 at Building 253 Tanks HPA-10, HPA-11, HPA-12, HPA-16, HPA-17 at Building 231 Tank S-215 at Building 271 Tank HPA-33, HPA-34 at Building 281 Tank HPA-07 at Building 272	NA
C	IR-29	Building 203 (Power Plant Substation H), Building 217 ^f and 275 (Sheetmetal Shop and Annex), Building 279 (Material Storage), Building 280 (Covered Work Area), and Building 282 ^f (Abrasive Blast Facility)	NA	Tanks S-203, S-209, S-210, S-211, S-212, and S-213 at Building 203	NA
C	IR-30	Building 241 (Forge Shop)	NA	NA	NA
C	SI-45 ^c	Steamlines (Utility Investigation)	NA	NA	NA
C	IR-49	Buildings 203 and 205 and Fuel Distribution Lines (Utility Investigation)	NA	NA	NA
C	IR-50	Storm Drains and Sanitary Sewer Lines (Utility Investigation)	NA	NA	NA
C	IR-51	Former Transformer Site	NA	NA	NA
C	IR-57	Dry Dock 4 Area	NA	NA	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
C	IR-58	Scrap Yard North of Building 258	NA	NA	NA
C	IR-63	NA	No. 89 - Building 278(d) ^c (Storage)	NA	NA
C	IR-64	NA	No. 90 - Building 206 ^c (Substation A)	NA	NA
D	IR-08	PCB Spill Area at Building 503 and Building 606 (Former Post Office)	NA	NA	NA
D	IR-09	Pickling and Plate Yard	NA	NA	NA
D	IR-16	Container Storage Site and Triple A Site No. 9	NA	NA	NA
D	IR-17	Drum Storage and Disposal Site and Triple A Site No. 10 and 11	NA	NA	NA
D	IR-22	Building 368 and 369 (Shop Service)	NA	Tank HPA-308 at Building 308	NA
D	SI-32 ^c	Building 383 (Shipping and Receiving) and Regunning Pier	NA	NA	NA
D	IR-33	Buildings 302 and 302A (Transportation Shop), Building 304 (Service Station), Building 364 (Radiation Hot Lab), Building 411 (Shipfitter Shop), and Building 418 (Welding Engineering)	No. 116 - Buildings 417, 418, and 424 (Welding Engineering and Area Time Office) No. 125 - Building 365 ^c (Storage)	Tanks S-304 and S-305 at Building 304	Building 364
D	IR-34	Building 351 (Electronics Shop) and Building 366 (Boat and Plastics Shop)	NA	NA	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^c	Underground Storage Tank Site	Radiation Site ^b
D	IR-35	Building 271 (Decontamination Training), Building 306 (Substation I), Buildings 313(d) and 313A(d) (Former Naval Radiological Defense Lab), Building 322 (Marine Guard and Pass Office), Building 372 (Prefab Decking Shelter), and the Area Bounded by Manseau, Morrell and E Streets.	NA	NA	NA
D	IR-36	Building 371 (Equipment Storage), Buildings 400, 404A, 405, 406, and 413 (Storehouse), Building 414 (Public Works Furniture Storehouse), Building 704 (Transportation Shop), Building 710 (Latrine), and Area West of Building 405.	NA	Tanks HPA-14, HPA-15 and S-711, S-712, S-713, S-714, and S-715 at Building 709	NA
D	IR-37	Building 401 (Public Works Shop), Building 423 (Compressor Hut), Building 435 (Equipment Storage), and Building 436 (Material Storage)	No. 177 - Building 437 (Pipe Storage)	Tanks S-435(1) and S-435(2) at Building 435	NA
D	SI-38 ^c	Building 500 (Chief Petty Officer Barracks), Building 506(d) (Navy Housing), Building 507(d) (Public Works Office), 508(d) (Locker Club), Building 509(d) (Library), Building 510(d) and 510A (Naval Ordnance Labs), and Building 517(d) (Marine Storage)	NA	Tanks S-508 at Building 500	Buildings 506(d), 507(d), 508(d), 509(d), 510(d), 510A, and 517(d)
D	IR-39	Building 505 (Navy Exchange), Building 519(d) (Chapel), Building 707 and 708 (Naval Radiological Defense Labs)	NA	NA	Building 707

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^c	Underground Storage Tank Site	Radiation Site ^b
D	SI-44 ^c	Area near Buildings 408, 409, 410, and 438	No. 126 - Building 438 ^c (Metal Spray Shelter)	NA	NA
D	IR-45	Steamlines	NA	NA	NA
D	SI-48 ^c	Steamlines at Building 503(d) (Utility Investigation)	NA	NA	NA
D	IR-50	Storm Drains and Sanitary Sewer Lines (Utility Investigation)	NA	NA	NA
D	IR-51	Former Transformer Site	NA	NA	NA
D	IR-53	Building 525 (Storehouse) and Building 530 (Automotive Hobby Shop)	NA	NA	NA
D	IR-55	Building 307 (Electronic Assembly) and Surrounding Area	NA	NA	NA
D	IR-65	NA	No. 123 - Building 324 ^c (Carbon Dioxide Refilling Station)	NA	NA
D	IR-66	NA	No. 127 - Building 407 ^c (Offices and Storehouse)	NA	NA
D	IR-67	NA	No. 128 - Building 439 ^c (Sheet Metal Shop)	NA	NA
D	IR-68	NA	No. 131 - Area North of Building 378 (Latrine)	NA	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
D	IR-69	NA	No. 134 - Building 523 (Saltwater Pump House) No. 135 - Metal Shed Near Building 523 ^c	NA	NA
D	IR-70	NA	No. 137 - Area Northeast of Building S-308	NA	NA
D	IR-71	NA	No. 140 - Crane Storage Yard at Corner of Manseau and Morrell Streets	NA	NA
E	IR-01	Industrial Landfill - Triple A Sites 1 and 16 and Area Southwest of Building 810 (IR 21)	NA	NA	NA
E	IR-02	Bayfill Area - Triple A Sites 2, 13(Partial), 14, 17(Partial), 18, 19, Burn Disposal Area, and AST S-505	NA	NA	IR-02
E	IR-03	Oil Reclamation Ponds and Triple A Site 17(Partial)	NA	NA	NA
E	IR-04	Scrap Yard - Triple A site 3 and Building 807 (Scrap Yard Shed)	NA	NA	NA
E	IR-05	Old Transformer Storage Yard	NA	NA	NA
E	IR-11	Area Around Building 521 (Power Plant)	No. 142 - Building 521 ^c (Power Plant)	NA	NA
E	IR-12	Disposal Trench and Salvage Yard - Triple A sites 3(Partial) and 4, and Building 702(d) (Storehouse)	NA	NA	NA
E	IR-13	Old Commissary Site (Buildings 524(d) and 803(d)) - Triple A sites 5 and 15	NA	NA	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
E	IR-14	Oily Liquid Waste Disposal Area - Triple A Sites 6 and 7, Building 506(d) (Navy Housing), Building 510(d), (Naval Investigation Service), Building 518(d) (Movie Theater), Building 520(d) (Dental Clinic), and Building 529(d) (Library)	NA	NA	Buildings 506(d), 510(d), and 510A
E	IR-15	Oily Waste Ponds and Incineration Tank and Triple A sites 12 and 13(Partial)	NA	NA	NA
E	IR 21	Area Southwest of Building 810	NA	NA	NA
E	SI-38 ^c	Building 500 (Chief Petty Officer Barracks), Building 506(d) (Navy Housing), Building 507(d) (Public Works Office), 508(d) (Locker Club), Building 509(d) (Library), Building 510(d) and 510A (Naval Ordnance Labs), and Building 517(d) (Marine Storage)	NA	NA	Buildings 506(d), 507(d), 508(d), 509(d), 510(d), 510A, and 517(d)
E	IR-39	Building 505 (Navy Exchange), Building 519(d) (Chapel), Building 707 and 708 (Naval Radiological Defense Labs)	NA	NA	Building 707
E	SI-40 ^c	Building 527 (Substation) and Pier 2.	NA	NA	NA
E	IR-45	Steamlines	NA	NA	NA
E	SI-47 ^c	Fuel Distribution Lines and AST S-505 (Utility Investigation)	NA	NA	NA
E	IR-50	Storm Drains and Sanitary Sewer Lines (Utility Investigation)	NA	NA	NA
E	IR-51	Former Transformer Site	NA	NA	NA

TABLE 1
LIST OF IR AND SI
HUNTER POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	Site Number	Building Number (Building Name or Type of Investigation)	Site Assessment Site and Building Name ^e	Underground Storage Tank Site	Radiation Site ^b
E	IR-52	Railroad Right-of-Way (Off Site West of Facility)	NA	NA	NA
E	SI-54 ^c	Building 511A (Offices and Woodworking Hobby Shop)	NA	NA	NA
E	IR-56	Area VII (Railroad Yard Southwest of Crisp Ave.) and Railroad Tracks	NA	NA	NA
E	IR-72	NA	No. 146 - Building 810 ^e (Storehouse)	Tanks S-801 and S-802 at Building 811	NA
E	IR-73	NA	No. 150 - Asphalt Batch Plant Northwest of Pier 2	NA	NA
E	SI-74 ^d	Building 815 (Main NRDL)	NA	NA	NA
E	SI-75 ^d	Building 820 (Cyclotron)	NA	NA	NA
E	IR-76	Area Surrounding Buildings 830 and 831	NA	NA	NA

Notes:

- NA Not applicable
- d Demolished building site
- a Designation of a site as "IR" indicates that a site has undergone preliminary assessment (PA) and site inspection (SI) investigation under the CERCLA process and has been recommended for further investigation at the remedial investigation (RI) level. The recommendation is based on the detected presence of contamination of hazardous substances and the need to adequately characterize its nature and extent.
- b Radiation sites, with the exception of IR-2, -7, and -18, are all at the SI level of investigation and may be listed within an IR site's geographic limit.
- c SI designation denotes that a site has undergone PA- and SI-level investigation and no further investigation is proposed to define nature and extent of contamination.
- d Radiation sites which have undergone a PA and are proposed for SI-level investigation to determine if release of radioactive materials has occurred and characterization is necessary.
- e Site assessment designation denotes that a site has undergone a PA consisting of a literature review, employee interviews, and a field audit. Further characterization is proposed at an SI and RI level.
- f No further RI work proposed in these buildings.

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TABLE 2
GEOLOGIC UNITS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Geologic Age	Geologic Units	Hydrogeologic Units
Holocene	Artificial Fill Undifferentiated Upper Sand Deposits	A-aquifer
Holocene	Bay Mud Deposits	Aquitard
Holocene to Pleistocene	Undifferentiated Sedimentary Deposits	B-aquifer
Jurassic to Cretaceous	Franciscan Complex Bedrock	Bedrock Water-Bearing Zone

Note: Holocene to Pleistocene are Quaternary age

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TABLE 3

SUMMARY OF EXISTING MONITORING WELLS AND PIEZOMETERS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	No. of Existing Monitoring Wells (Piezometer)		
		A-aquifer	B-aquifer	Bedrock Water-Bearing Zone
B	IR-06	14	0	12
	IR-07	11 (1)	0	1
	IR-10	12	0	0
	IR-18	4	0	0
	IR-20	4	0	0
	IR-24	3	0	0
	IR-25	5	0	0
	IR-26	3	0	0
	IR-46	11 (2)	0	0
	IR-50	2	0	0
	UT-02	3	0	0
	UT-03	3	0	0
TOTAL		75 (3)	0	13
C	IR-28	21	1	9
	IR-29	2	0	4
	IR-50	3	0	1
	IR-58	2	0	2
	TOTAL	28	1	16
D	IR-08	9 (1)	0	0
	IR-09	8 (6)	0	1
	IR-16	3	0	0
	IR-17	3 (2)	0	0
	IR-22	4	0	0
	PA-32/ SI32	1	0	0
	IR-33	8	0	0

TABLE 3

SUMMARY OF EXISTING MONITORING WELLS AND PIEZOMETERS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA
(Continued)

Parcel	IR Site	No. of Existing Monitoring Well (Piezometer)		
		A-aquifer	B-aquifer	Bedrock Water-bearing Zone
D	R-34	2	0	0
	IR-35	1 (1)	0	0
	IR-36	16	0	0
	IR-37	1	0	0
	IR-38	3	0	0
	IR-39	6	0	0
	IR-50	10	0	0
	IR-55	3	0	0
	TOTAL	78 (10)	0	1
E	IR-01	21	7	0
	IR-02	31 (4)	2	0
	IR-03	10	2	0
	IR-04	10 (3)	0	0
	IR-05	6 (2)	0	0
	IR-11	3	0	0
	IR-12	11 (2)	0	0
	IR-13	3 (2)	0	0
	IR-14	5	0	0
	IR-15	3	0	2
	IR-39	1	0	0
	IR-50	2	0	0
	IR-56	1	0	0
	TOTAL	107 (13)	11	2
TOTAL		288 (26)	12	32

TABLE 4

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL B
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
B-1	IR-06 IR-10 IR-20 IR-24 IR-25 IR-26 IR-46	VOCs, SVOCs, PCBs, TPH-d, TPH-mo, and heavy metals (including hexavalent chromium) in the A-aquifer VOCs, TPH-d, and TPH-mo in bedrock.	IR10MW15A ^c IR25MW17A ^c	IR10MW29A1 ^c IR10MW29A2 ^c PA50MW01A ^c PA50MW02A ^c		PA24MW01A PA24MW02A ^c PA24MW03A ^c IR06MW22A IR06MW23A IR06MW27A IR06MW30A IR06MW32A IR06MW34A ^c IR06MW35A IR06MW40A IR06MW41A IR06MW42A IR06MW44A IR06MW45A IR06MW46A IR06MW47F ^c IR06MW48F ^c IR06MW49F ^c IR06MW50F ^c IR06MW51F ^c IR06MW52F ^c IR06MW53F ^c IR06MW55F ^c IR06MW56F ^c IR06MW57F ^c IR06MW58F ^c	Three additional monitoring wells will be installed at bay front at IR-46, as part of the RI, to further characterize the extent of this groundwater plume. Three additional monitoring wells will be installed at IR-26, as part of the RI, to further characterize the extent of this groundwater plume.

TABLE 4

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL B
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**
(Continued)

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
B-1 (Cont.)						IR10MW12A ^c IR10MW13A1 IR10MW13A2 IR10MW14A IR10MW28A IR10MW31A1 IR10MW31A2 IR10MW32A IR20MW01A IR20MW06A IR20MW11A IR20MW17A IR25MW11A ^a IR25MW15A1 ^b IR25MW15A2 ^b IR25MW16A IR26MW36A IR26MW40A ^a IR26MW41A IR46MW37A IR46MW38A IR46MW39A ^a IR46MW39A2 ^b	

TABLE 4

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL B
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

(Continued)

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
B-1 (Cont.)						IR46MW39A^a IR46MW40A^a IR46MW40A^b IR46MW40A^c IR46MW41A^a IR46MW42A^a IR46MW43A^a	
B-2	IR-07 IR-23	TPH-g and TPH-mo	UT03MW10A^a IR07MWS-1^a	IR07MWS-2^b		UT03MW11A^a UT03MW12A^c	
B-3	IR-62	Pesticides, TPH-d, and TPH-mo		UT03MW10A^a		UT02MW15A^a UT02MW16A UT02MW17A^a	

Notes:

- a The monitoring well will be sampled quarterly.
- b The monitoring well will be sampled semiannually.
- c The monitoring well will be sampled annually.

SVOCs Semivolatile organic compounds
TPH-d Total petroleum hydrocarbon as diesel
TPH-g Total petroleum hydrocarbons as gasoline
TPH-mo Total petroleum hydrocarbons as motor oil
VOCs Volatile organic compounds

Shaded monitoring wells will be included in the facility-wide monitoring program.

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TABLE 5

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL C
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
C-1	IR-28	VOCs, SVOCs, PCBs, TPH-d, TPH-g, and TPH-mo in the A-aquifer TPH-mo in the B-aquifer	PA28P04A ^c IR28MW169A ^c	IR28MW122A ^b IR28MW123A ^b IR28MW124A ^b PA50MW03A ^b	PA28P02A	IR28MW125A IR28MW126A IR28MW127A ^c IR28MW128A IR28MW129A ^c IR28MW136A ^c IR28MW149A IR28MW150A IR28MW151A ^c IR28MW155A IR28MW170A IR28MW171A IR28MW173B ^c PA28MW50A PA28MW51A ^c PA28MW52A PA28P03A	Three additional bay front downgradient wells will be installed during the RI.
C-2	IR-28 IR-58	VOCs, SVOCs, TPH-d, and TPH-g in the A-aquifer VOCs, TPH-g, and TPH-mo in bedrock	IR58MW25F ^c IR58MW26A ^c		PA28P02A	IR28MW172F ^c IR28MW188F ^c IR28MW189F ^c IR28MW190F ^c IR28MW201F ^c IR28MW211F ^c IR28MW216F ^c IR28MW217A IR58MW31A ^c	Five down-gradient monitoring wells and one cross-gradient well will be installed during the RI to monitor this plume.

TABLE 5

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL C
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**
(Continued)

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
C-3	IR-29	SVOCs, TPH-d, TPH-g, TPH-mo and in the A-aquifer VOCs, SVOCs, TPH-d, and TPH-mo in bedrock			IR29MW48A ^b IR29MW59F	IR29MW56F ^b IR29MW57A ^c IR29MW58F ^b	One downgradient well and one cross-gradient well will be installed during the RI to monitor the plume.

Notes:

- b The monitoring well will be sampled semiannually.
- c The monitoring well will be sampled annually.
- SVOCs Semivolatile organic compounds
- TPH-d Total petroleum hydrocarbons as diesel
- TPH-g Total petroleum hydrocarbons as gasoline
- TPH-mo Total petroleum hydrocarbons as motor oil
- VOCs Volatile organic compounds

Shaded wells will be included in the facility-wide groundwater monitoring program.

TABLE 6

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL D
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
D-1	IR-33 IR-34	VOCs, SVOCs, TPH-d, TPH-g, and TPH-mo	IR09MW31A ^c	PA50MW11A ^b		IR33MW61A ^c IR33MW62A ^c IR33MW64A IR33MW65A IR33MW66A IR34MW01A	
D-2	IR-09	SVOCs and chromium VI		IR50MW12A ^c IR09MW31A ^c IR09MW36A ^c IR09MW37A ^c IR09P041A ^b	IR09MW44A	IR09PPY1 IR09MW35A IR09MW38A ^c IR09MW39A	Area D-2 is located at a groundwater mound, therefore, no upgradient wells are applicable.
D-3	IR-36 (Building 406)	VOCs (suspected DNAPL plume)	IR36MW16A ^c IR36MW17A ^c	IR36MW09A ^c IR36MW15A ^b PA36MW04A ^b	PA36MW05A ^c		Two additional downgradient wells and two in-plume wells have been proposed for DNAPL study for this plume as part of the RI.
D-4	IR-36	TPH-d and TPH-mo	PA36MW05A ^c PA36MW08A ^c	IR39MW23A ^b PA50MW09A ^b		PA36MW06A IR36MW12A ^c IR36MW13A IR36MW14A IR39MW24A	Since groundwater flows to sanitary sewer lines in this area, upgradient and downgradient wells are difficult to define.
D-5	IR-39	VOCs, SVOCs, and TPH-mo	IR13MW10A ^c	IR39MW22A ^b	PA50MW09A ^b	IR39MW21A ^c	This affected area crosses Parcels D and E boundary.

Note:

^b The monitoring well will be sampled semiannually.
^c The monitoring well will be sampled annually.

DNAPL

Dense non-aqueous phase liquid

SVOCs

Semivolatile organic compounds

TPH-d

Total petroleum hydrocarbons as diesel

TPH-g

Total petroleum hydrocarbons as gasoline

TPH-mo

Total petroleum hydrocarbons as motor oil

VOCs

Volatile organic compounds

Shaded wells will be sampled annually.

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TABLE 7

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL E
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
E-1	IR-01/21 IR-02	VOCs, SVOCs, PCBs, TPH-d, TPH-g, and heavy metal in the A-aquifer SVOCs and heavy metals in the B-aquifer at IR-01 only (Contaminants were not detected in the groundwater in the B-aquifer at IR-02.)	IR01MWI-6^a	IR01MW42A^a IR01MWI-2^c		IR01MW02B^a IR01MW03A IR01MW05A IR01MW07A IR01MW16A IR01MW17B IR01MW18A^a IR01MW26B IR01MW31A IR01MW38A IR01MW43A^a IR01MW44A^a IR01MW47B^a IR01MW48A^a IR01MW53B^a IR01MW58A^a IR01MW62A IR01MW63A IR01MWI-3^a IR01MWI-5 IR01MWI-7^a IR01MWI-8^a IR01MWI-9^a IR02MW126A^a IR02MW141A IR02MWB-3^a	Upgradient wells will be installed during FUDS investigation. Four additional wells will be installed during the RI to monitor this plume.

TABLE 7

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL E
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**
(Continued)

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
E-2	IR-04 IR-12 IR-56 IR-72	VOCs, SVOCs, TPH-d, and TPH-g	IR04MW09A ^c IR01MW1-2 ^c IR04MW31A ^c IR04MW40A ^c IR12MW11A ^c	IR04MW39A ^c IR05MW77A ^c IR05MW82A ^c IR12MW15A ^c IR12MW20A ^c PA50MW10A ^c	IR04MW38A IR02MW87A IR12MW12A	IR04MW13A ^c IR04MW35A IR04MW36A IR04MW37A IR05MW76A IR12MW13A IR12MW14A IR12MW17A IR12MW18A IR12MW19A IR12MW21A ^c	Upgradient wells will be installed during FUDS investigation.
E-3	IR-13	SVOCs		IR39MW22A ^b	IR13MW12A	IR13MW11A ^c	Only bis(2-ethylhexyl) phthalate (1380 µg/L) was detected at well IR13MW11A.
E-4	IR-03	VOCs, SVOCs, PCBs, and heavy metals		IR02MW299A ^c IR14MW09A ^c	IR02MWB-5 ^c	IR02MW146A IR02MW173A IR03MW218A1 IR03MW218A2 IR03MW218A3	

TABLE 7

**CONTAMINANT-AFFECTED GROUNDWATER AREAS AND RELATED MONITORING WELLS AT PARCEL E
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**
(Continued)

Area No.	Location (IR Site)	Contaminants	Monitoring Well Relation to the Affected Area				Comments
			Upgradient	Downgradient	Cross-gradient	Within	
E-4 (Cont.)	IR-03					IR03MW224A IR03MW225A ^c IR03MW226A ^c IR03MW342A IR03MWO-1 ^c IR03MWO-2 IR03MWO-3	
E-5	IR-11 IR-14 IR-15	VOCs, SVOCs, pesticides, TPH-d, and TPH-g		IR02MW196A ^c IR02MW209A ^b IR14MW09A ^c		IR11MW25A ^c IR11MW26A IR11MW27A ^c IR14MW13A ^c IR15MW06A IR15MW08A ^c	This plume is located at groundwater mound and no upgradient well is applicable to this plume.

Notes:

- a The monitoring well will be sampled quarterly.
- b The monitoring well will be sampled semianually.
- c The monitoring well will be sampled annually.
- FUDs Formerly utilized defense sites
- SVOCs Semivolatile organic compounds
- TPH-d Total petroleum hydrocarbons as diesel
- TPH-g Total petroleum hydrocarbons as gasoline
- TPH-mo Total petroleum hydrocarbons as motor oil
- VOCs Volatile organic compounds

Shaded monitoring wells will be included in the facility-wide groundwater monitoring program.

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TABLE 8

LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
QUARTERLY MONITORING PROGRAM (d)				
B	IR-06	IR06MW34A	Area B-1	VOCs, SVOCs, PCBs, TPH-d, TPH-mo, metals, and hexavalent chromium
	IR-24	PA24MW02A		
		PA24MW03A		
	IR-26	IR26MW40A		
	IR-46	IR46MW39A		
		IR46MW39A2		
		IR46MW39A3		
		IR46MW40A		
		IR46MW40A2		
E	IR-01	IR01MW43A	Area E-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals, and MTBE
		IR01MW44A		
		IR01MW47B	Area E-1 (B-aquifer)	SVOCs and metals
		IR01MW48A		
		IR01MW53B	Area E-1 (B-aquifer)	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals, and MTBE
		IR01MWI-3		
		IR01MWI-7		
		IR01MWI-8		
	IR-02	IR02MW126A	Area E-1	SVOCs and metals
		IR02MWB-3		

TABLE 8 (continued)

LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
SEMIANNUAL MONITORING PROGRAM				
B	IR-07	IR07MWS-2	Area B-2	TPH-g ,TPH-mo, and MTBE
C	IR-28	IR28MW122A	Area C-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, and MTBE
		IR28MW123A		
		IR28MW124A		
D	IR-50	PA50MW03A		VOCs
		IR36MW15A	Area D-3	
	IR-39	PA36MW04A	VOCs, SVOCs, and TPH-mo	
		IR39MW22A	Areas D-5 and E-3	TPH-d, and TPH-mo
		IR39MW23A		
	IR-50	PA50MW09A	Area D-4 and D-5	VOCs, SVOCs, TPH-d, and TPH-mo
		PA50MW11A		
E	IR-02	IR02MW209A	Area E-5	VOCs, SVOCs, pesticides, TPH-d, TPH-g, and MTBE
ANNUAL MONITORING PROGRAM				
B	IR-06	IR06MW47F	Area B-1 (bedrock)	VOCs, TPH-d, and TPH-mo
		IR06MW48F		
		IR06MW49F		
		IR06MW50F		
		IR06MW51F		
		IR06MW52F		
		IR06MW53F		
		IR06MW55F		
		IR06MW56F		
		IR06MW57F		
		IR06MW58F		
	IR-07	IR07MWS-1	Area B-2	TPH-g, TPH-mo, and MTBE

TABLE 8 (continued)

LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
ANNUAL MONITORING PROGRAM (Continued)				
B	IR-10	IR10MW12A IR10MW15A IR10MW29A1 IR10MW29A2	Area B-1	VOCs, SVOCs, PCBs, TPH-d, TPH-mo, metals, and hexavalent chromium
	IR-23	UT03MW10A	Areas B-2 and B-3 Area B-2	Pesticides, TPH-d, TPH-g, TPH-mo, and MTBE
		UT03MW11A UT03MW12A		TPH-g, TPH-mo, and MTBE
	IR-25	IR25MW11A IR25MW15A1 IR25MW15A2 IR25MW17A	Area B-1	VOCs, SVOCs, PCBs, TPH-d, TPH-mo, metals, and hexavalent chromium
	IR-50	PA50MW01A PA50MW02A	Area B-3	
	IR-62	UT02MW15A UT02MW17A		Pesticides, TPH-d and TPH-mo
C	IR-28	IR28MW127A IR28MW129A IR28MW136A IR28MW151A IR28MW169A	Area C-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, TPH-mo and MTBE
		IR28MW172F	Area C-2 (bedrock)	VOCs, TPH-g, TPH-mo and MTBE
		IR28MW173B	Area C-1 (B-aquifer)	TPH-mo
		IR28MW188F IR28MW189F IR28MW190F IR28MW201F	Area C-2 (bedrock)	VOCs, TPH-g, TPH-mo and MTBE

TABLE 8 (continued)

LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
ANNUAL MONITORING PROGRAM (Continued)				
C	IR-28	IR28MW21F	Area C-2 (bedrock)	VOCs, TPH-g, TPH-mo and MTBE
		IR28MW216F		
	IR-29	PA28MW51A	Area C-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, TPH-mo and MTBE
		PA28P04A		
		IR29MW48A	Area C-3	SVOCs, TPH-d, TPH-g, TPH-mo, and MTBE
		IR29MW56F	Area C-3 (bedrock)	VOCs, SVOCs, TPH-d, and TPH-mo
		IR29MW57A	Area C-3	SVOCs, TPH-d, TPH-g, TPH-mo, and MTBE
		IR29MW58F	Area C-3 (bedrock)	VOCs, SVOCs, TPH-d, and TPH-mo
	IR-58	IR58MW25F	Area C-2 (bedrock)	VOCs, TPH-g, TPH-mo and MTBE
		IR58MW26A	Area C-2	VOCs, SVOCs, TPH-d, TPH-g, and MTBE
		IR58MW31A		
D	IR-09	IR09MW31A	Area D-1 and D-2	VOCs, SVOCs, TPH-d, TPH-g, TPH-mo, chromium VI, and MTBE
		IR09MW36A	Area D-2	SVOC and chromium IV
		IR09MW37A		
		IR09MW38A		
		IR09PPY1		
		IR09P041A		
	IR-33	IR33MW61A	Area D-1	VOCs, SVOCs, TPH-d, TPH-g, TPH-mo, and MTBE
		IR33MW62A		
	IR-36	IR36MW09A	Area D-3	VOCs
		IR36MW12A	Area D-4	TPH-d and TPH-mo
		IR36MW16A	Area D-3	VOCs
		IR36MW17A		
		PA36MW05A	Areas D-3 and D-4	VOCs, TPH-d, and TPH-mo
	IR-39	PA36MW08A	Area D-4	TPH-d and TPH-mo
		IR39MW21A	Area D-5	VOCs, SVOCs, and TPH-mo

TABLE 8 (continued)

**LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
ANNUAL MONITORING PROGRAM (Continued)				
D	IR-50	PA50MW12A	Area D-2	SVOC and chromium IV
E	IR-01	IR01MW02B	Area E-1 (B-aquifer)	SVOCs and metals
		IR01MW18A	Area E-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals, and MTBE
		IR01MW42A		
		IR01MW58A		
		IR01MWI-2	Areas E-1 and E-2	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals, and MTBE
	IR-02	IR01MWI-6	Area E-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals, and MTBE
		IR01MWI-9	Area E-1	VOCs, SVOCs, PCBs, TPH-d, TPH-g, metals and MTBE
		IR02MW196A	Area E-5	VOCs, SVOCs, pesticides, TPH-d, TPH-g, and MTBE
	IR-03	IR02MW299A	Area E-4	VOCs, SVOCs, PCBs, and metals
		IR02MWB-5		
		IR03MW225A		
	IR-04	IR03MW226A		
		IR03MW0-1		
		IR04MW09A	Area E-2	VOCs, SVOCs, TPH-d, TPH-g, and MTBE
		IR04MW13A		
		IR04MW31A		
	IR-05	IR04MW39A		
		IR04MW40A		
	IR-11	IR05MW77A		
		IR05MW82A		
	IR-11	IR11MW25A	Area E-5	VOCs, SVOCs, pesticides, TPH-d, TPH-g, and MTBE
	IR11MW27A			
	IR-12	IR12MW11A	Area E-2	VOCs, SVOCs, TPH-d, TPH-g, and MTBE
	IR12MW15A			
	IR12MW20A			

TABLE 8 (continued)

LIST OF MONITORING WELLS AND ANALYSES FOR GROUNDWATER MONITORING PROGRAM
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well Name	Well Related to Which Affected Area	Analyses (a, b, c)
ANNUAL MONITORING PROGRAM (Continued)				
E	IR-12	IR12MW21A	Area E-2	VOCs, SVOCs, TPH-d, TPH-g, and MTBE
	IR-13	IR13MW10A	Area D-5	VOCs, SVOCs, and TPH-mo
		IR13MW11A	Area E-3	SVOCs
	IR-14	IR14MW09A IR14MW13A	Area E4 and E-5	VOCs, SVOCs, pesticides, TPH-d, TPH-g, and MTBE
	IR-15	IR15MW08A	Area E-5	VOCs, SVOCs, pesticides, TPH-d, TPH-g, and MTBE
	IR-50	PA50MW10A	Area E-2	VOCs, SVOCs, TPH-d, TPH-g, and MTBE

Notes:

- MTBE Methyl tertiary butyl ether
PCBs Polychlorinated biphenyls
SVOCs Semivolatile organic compounds
TPH-d Total petroleum hydrocarbons as diesel
TPH-g Total petroleum hydrocarbons as gasoline
TPH-mo Total petroleum hydrocarbons as motor oil
VOCs Volatile organic compounds
a PCBs, SVOCs, VOCs, and MTBE will be analyzed using U.S. Environmental Protection Agency Contract Program Laboratory (CLP) methods.
b TPH-d, TPH-g, and TPH-mo will be analyzed using California "Leaking Underground Fuel Tank Field Manual" methods.
c Chromium VI will be analyzed using EPA Method 7196.
d This list does not include the monitoring wells installed after July 1995, and it will be revised to include these wells before the groundwater monitoring program is implemented.

TABLE 9
SELECTION OF MONITORING WELLS FOR PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-06	IR06MW22A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW23A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW27A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW30A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW32A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW34A	Yes	No	No	In Area B-1	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	IR06MW35A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW40A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW41A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW42A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW44A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW45A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW46A	No	No	No	In Area B-1	Not a hot spot well
	IR06MW47F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW48F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW49F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW50F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW51F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW52F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW53F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW54F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated in this area.
	IR06MW55F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW56F	No	No	Yes	In Area B-1	Bedrock well within the affected area

TABLE 9 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-06	IR06MW57F	No	No	Yes	In Area B-1	Bedrock well within the affected area
	IR06MW58F	No	No	Yes	In Area B-1	Bedrock well within the affected area
IR-07	IR07MW19A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MW20A1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MW20A2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MW21A1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MW21A2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MW23A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MWP-1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MWP-2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR07MWS-1	No	No	Yes	Upgradient of Area B-2	No contaminant was detected.
	IR07MWS-2	No	Yes	No	Downgradient of Area B-2	No contaminant was detected but on bay front.
IR-10	IR10MW13A1	No	No	No	In Area B-1	Not a hot spot well
	IR10MW13A2	No	No	No	In Area B-1	Not a hot spot well
	IR10MW14A	No	No	No	In Area B-1	Not a hot spot well
	IR10MW15A	No	No	Yes	Upgradient of Area B-1	Antimony was detected at 32.8 µg/L, exceeding MCL of 6 µg/L.
	IR10MW28A	No	No	No	In Area B-1	Not a hot spot well
	IR10MW29A1	No	No	Yes	Downgradient of Area B-1	No contaminant was detected, and not located on bay front.
	IR10MW29A2	No	No	Yes	Downgradient of Area B-1	No contaminant was detected, and not located on bay front.
	IR10MW31A1	No	No	No	In Area B-1	Not a hot spot well
	IR10MW31A2	No	No	No	In Area B-1	Not a hot spot well

TABLE 9 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-10	IR10MW32A	No	No	No	In Area B-1	Not a hot spot well
IR-18	IR18MW21A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR18MW22A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA18MW08A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA18MW09A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-20	IR20MW01A	No	No	No	In Area B-1	Not a hot spot well
	IR20MW06A	No	No	No	In Area B-1	Not a hot spot well
	IR20MW11A	No	No	No	In Area B-1	Not a hot spot well
	IR20MW17A	No	No	No	In Area B-1	Not a hot spot well
IR-23	UT03MW10A	No	No	Yes	Downgradient of Area B-3	No contaminant was detected.
	UT03MW11A	No	No	Yes	In Area B-2	Hot spot well
	UT03MW12A	No	No	Yes	In Area B-2	Hot spot well
IR-24	PA24MW01A	No	No	No	In Area B-1	Not a hot spot well
	PA24MW02A	Yes	No	No	In Area B-1	On bay front
	PA24MW03A	Yes	No	No	In Area B-1	On bay front
IR-25	IR25MW11A	No	No	Yes	In Area B-1	Hot spot well
	IR25MW15A1	No	No	Yes	In Area B-1	Hot spot well (a potential DNAPL well)
	IR25MW15A2	No	No	Yes	In Area B-1	A potential DNAPL well
	IR25MW16A	No	No	No	In Area B-1	Not a hot spot well
	IR25MW17A	No	No	Yes	Upgradient of Area B-1	Thallium was detected at 6.92 µg/L, exceeding MCL of 2 µg/L.
IR-26	IR26MW36A	No	No	No	In Area B-1	Not a hot spot well
	IR26MW40A	Yes	No	No	In Area B-1	On bay front
	IR26MW41A	No	No	No	In Area B-1	Not a hot spot well
IR-46	IR46MW37A	No	No	No	In Area B-1	Not a hot spot well

TABLE 9 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-46	IR46MW38A	No	No	No	In Area B-1	Not a hot spot well
	IR46MW39A	Yes	No	No	In Area B-1	On bay front
	IR46MW39A2	Yes	No	No	In Area B-1	On bay front
	IR46MW39A3	Yes	No	No	In Area B-1	On bay front
	IR46MW40A	Yes	No	No	In Area B-1	On bay front
	IR46MW40A2	Yes	No	No	In Area B-1	On bay front
	IR46MW40A3	Yes	No	No	In Area B-1	On bay front
	IR46MW41A	Yes	No	No	In Area B-1	On bay front
	IR46MW42A	Yes	No	No	In Area B-1	On bay front
	IR46MW43A	Yes	No	No	In Area B-1	On bay front
IR-50	PA50MW01A	No	No	Yes	Downgradient of Area B-1	No contaminant was detected.
	PA50MW02A	No	No	Yes	Not related to the affected areas	Close to sanitary sewer system
IR-62	UT02MW15A	No	No	Yes	In Area B-3	Hot spot well
	UT02MW16A	No	No	No	In Area B-3	Not a hot spot well
	UT02MW17A	No	No	Yes	In Area B-3	Hot spot well

Notes: DNAPL Dense non-aqueous phase liquid
MCL Maximum contaminant level
μg/L Micrograms per liter

TABLE 10
SELECTION OF MONITORING WELLS FOR PARCEL C
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-28	IR28MW122A	No	Yes	No	Downgradient of Area C-1	No contaminant was detected, but on bay front.
	IR28MW123A	No	Yes	No	Downgradient of Area C-1	No contaminant was detected, but on bay front.
	IR28MW124A	No	Yes	No	Downgradient of Area C-1	No contaminant was detected, but on bay front.
	IR28MW125A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW126A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW127A	No	No	Yes	In Area C-1	Hot spot well
	IR28MW128A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW129A	No	No	Yes	In Area C-1	Hot spot well
	IR28MW136A	No	No	Yes	In Area C-1	Hot spot well
	IR28MW140F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated.
	IR28MW149A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW150A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW151A	No	No	Yes	In Area C-1	Hot spot well
	IR28MW155A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW169A	No	No	Yes	Upgradient of Area C-1	No contaminant was detected.
	IR28MW170A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW171A	No	No	No	In Area C-1	Not a hot spot well
	IR28MW172F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW173B	No	No	Yes	In Area C-1	Hot spot well for the B-aquifer
	IR28MW188F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW189F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW190F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW200A	No	No	No	In Area C-2	Not a hot spot well
	IR28MW201F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW211F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW216F	No	No	Yes	In Area C-2	Bedrock well within the affected area
	IR28MW217A	No	No	No	In Area C-2	Not a hot spot well

TABLE 10 (continued)

**SELECTION OF MONITORING WELLS FOR PARCEL C
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-28	IR28MW255F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated.
	PA28MW50A	No	No	No	In Area C-1	Not a hot spot well
	PA28MW51A	No	No	Yes	In Area C-1	Hot spot well
	PA28MW52A	No	No	No	In Area C-1	Not a hot spot well
	PA28P02A	No	No	No	Cross-gradient of Areas C-1 and C-2	No contaminant was detected.
	PA28P03A	No	No	No	In Area C-1	Not a hot spot well
	PA28P04A	No	No	Yes	Upgradient of Area C-1	No contaminant was detected.
IR-29	IR29MW48A	No	No	Yes	Cross-gradient of Area C-3	Low levels (< 2 µg/L) of pesticide and PCBs detected.
	IR29MW56F	No	No	Yes	In Area C-3	Hot spot well
	IR29MW57A	No	No	Yes	In Area C-3	Hot spot well
	IR29MW58F	No	No	Yes	In Area C-3	Bedrock well within the affected area
	IR29MW59F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated in this area.
	IR29MW72F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated in this area.
IR-50	IR50MW13A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW03A	No	Yes	No	Downgradient of Area C-1	No contaminant was detected but on bay front.
	PA50MW04A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-58	IR58MW24F	No	No	No	Not related to the affected areas	Groundwater in bedrock is not contaminated in this area.
	IR58MW25F	No	No	Yes	Upgradient of Area C-2	No contaminant was detected.
	IR58MW26A	No	No	Yes	Upgradient of Area C-2	No contaminant was detected.
	IR58MW31A	No	No	Yes	In Area C-1	Hot spot well

Notes: PCBs
μg/L

TABLE 11
SELECTION OF MONITORING WELLS FOR PARCEL D
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-08	IR08MW37A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW38A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW39A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW40A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW41A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW42A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW43A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MW44A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08MWW-6	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR08P39A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-09	IR09MW31A	No	No	Yes	Downgradient of Area D-2	No contaminant was detected.
	IR09MW35A	No	No	No	In Area D-2	Not a hot spot well
	IR09MW36A	No	No	Yes	Downgradient of Area D-2	No contaminant was detected.
	IR09MW37A	No	No	Yes	Downgradient of Area D-2	No contaminant was detected.
	IR09MW38A	No	No	Yes	In Area D-2	Hot spot well
	IR09MW39A	No	No	No	In Area D-2	Not a hot spot well
	IR09MW44A	No	No	No	Cross-gradient of Area D-2	No contaminant was detected.
	IR09MW45F	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR09PPY1	No	No	Yes	In Area D-2	Hot spot well
	IR09P35AA	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR09P35AB	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR09P40A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR09P41A	No	No	Yes	Downgradient of Area D-2	No contaminant was detected.
	IR09P42A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR09P43A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-16	PA16MW16A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 11 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL D
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-16	PA16MW17A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA16MW18A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-17	IR17MW11A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR17MW12A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR17P12AA	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR17P12AB	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR17MW13A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-22	IR22MW07A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR22MW08A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR22MW15A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR22MW16A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
SI-32	PA32MW04A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-33	IR33MW61A	No	No	Yes	In Area D-1	Hot spot well
	IR33MW62A	No	No	Yes	In Area D-1	Hot spot well
	IR33MW63A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR33MW64A	No	No	No	In Area D-1	Not a hot spot well
	IR33MW65A	No	No	No	In Area D-1	Not a hot spot well
	IR33MW66A	No	No	No	In Area D-1	Not a hot spot well
	PA33MW36A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-33	PA33MW37A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-34	IR34MW01A	No	No	No	In Area D-1	Not a hot spot well
	IR34MW02A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-35	IR35MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA35PO1A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-36	IR36MW09A	No	No	Yes	Downgradient of Area D-3	No contaminant was detected.
	IR36MW11A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 11 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL D
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-36	IR36MW12A	No	No	Yes	In Area D-4	Hot spot well
	IR36MW13A	No	No	No	In Area D-4	Not a hot spot well
	IR36MW14A	No	No	No	In Area D-4	Not a hot spot well
	IR36MW15A	No	Yes	No	Downgradient of Area D-3	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	IR36MW16A	No	No	Yes	Upgradient of Area D-3	No contaminant was detected.
	IR36MW17A	No	No	Yes	Upgradient of Area D-3	No contaminant was detected.
	PA36MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA36MW02A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA36MW03A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA36MW04A	No	Yes	No	Downgradient of Area D-3	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	PA36MW05A	No	No	Yes	Cross-gradient of Area D-3 and upgradient of Area D-4	No contaminant was detected.
	PA36MW06A	No	No	No	In Area D-4	Not a hot spot well
	PA36MW07A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA36MW08A	No	No	Yes	Upgradient of Area D-4	No contaminant was detected.
IR-37	IR37MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-38	IR38MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-38	IR38MW02A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR38MW03A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-39	IR39MW21A	No	No	Yes	In Area D-5	Hot spot well
	IR39MW22A	No	Yes	No	Downgradient of Area D-5	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	IR39MW23A	No	Yes	No	Downgradient of Area D-4	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area

TABLE 11 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL D
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-39	IR39MW24A	No	No	No	In area D-4	Not a hot spot well
	PA39MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA39MW02A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-50	IR50MW14A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR50MW15A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW05A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW06A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW07A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW08A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	PA50MW09A	No	Yes	No	Downgradient of Area D-4 and cross-gradient of D-5	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	PA50MW11A	No	Yes	No	Downgradient of D-1	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
	PA50MW12A	No	No	Yes	Downgradient of D-2	No contaminant was detected.
IR-55	IR55MW01A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR55MW02A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR55MW04A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 12
SELECTION OF MONITORING WELLS FOR PARCEL E
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR01	IR01MW02B	No	No	Yes	In Area E-1	Hot spot well
	IR01MW03A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW05A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW07A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW09B	No	No	No	Not related to the affected areas	Groundwater in the B-aquifer is not contaminated in this area.
	IR01MW16A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW17B	No	No	No	In Area E-1	Not a hot spot well
	IR01MW18A	No	No	Yes	In Area E-1	Hot spot well
	IR01MW26B	No	No	No	In Area E-1	Not a hot spot well
	IR01MW31A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW38A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW42A	No	No	Yes	Downgradient of Area E-1	No contaminant was detected, and not on bay front.
	IR01MW43A	Yes	No	No	In Area E-1	Hot spot well, and on bay front
	IR01MW44A	Yes	No	No	In Area E-1	On bay front
	IR01MW47B	Yes	No	No	In Area E-1	On bay front
	IR01MW48A	Yes	No	No	Downgradient of Area E-1	On bay front
	IR01MW53B	Yes	No	No	Downgradient of Area E-1	On bay front
	IR01MW58A	No	No	Yes	In Area E-1	Hot spot well
	IR01MW62A	No	No	No	In Area E-1	Not a hot spot well
	IR01MW63A	No	No	No	In Area E-1	Not a hot spot well
	IR01MWI-2	No	No	Yes	Downgradient of Area E-1	No contaminant was detected, and not on bay front.
	IR01MWI-3	Yes	No	No	In Area E-1	Hot spot well and on bay front
	IR01MWI-5	No	No	No	In Area E-1	Not a hot spot well
	IR01MWI-6	No	No	Yes	Upgradient of Area E-1	No contaminant was detected.
	IR01MWI-7	Yes	No	No	In Area E-1	On bay front
	IR01MWI-8	Yes	No	No	In Area E-1	On bay front
	IR01MWI-9	No	No	Yes	In Area E-1	Hot spot well

TABLE 12 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL E
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-02	IR02MW87A	No	No	No	Cross-gradient of Area E-2	No contaminant was detected.
	IR02MW89A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW93A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW97A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW101A1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW101A2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW114A1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW114A2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW114A3	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW126A	Yes	No	No	In Area E-1	On bay front
	IR02MW127B	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW141A	No	No	No	In Area E-1	Not a hot spot well
	IR02MW146A	No	No	No	In Area E-4	Not a hot spot well
	IR02MW147A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW149A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW173A	No	No	No	In Area E-4	Not a hot spot well
	IR02MW175A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW179A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW183A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW196A	No	No	Yes	Downgradient of Area E-5	No contaminant was detected.
	IR02MW206A1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW206A2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW209A	No	Yes	No	Downgradient of Area E-5	No contaminant was detected, but on bay front.
	IR02MW210B	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW298A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MW299A	No	No	Yes	Downgradient of Area E-4	No contaminant was detected.
	IR02MW300A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 12 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL E
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-02	IR02MWB-1	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MWB-2	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR02MWB-3	Yes	No	No	In Area E-1	On bay front
	IR02MWB-5	No	No	Yes	Cross-gradient of Area E-4	No contaminant was detected but on bay front.
	IR02MWC5-W	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-03	IR03MW218A1	No	No	No	In Area E-4	Not a hot spot well
	IR03MW218A2	No	No	No	In Area E-4	Not a hot spot well
	IR03MW218A3	No	No	No	In Area E-4	Not a hot spot well
	IR03MW224A	No	No	No	In Area E-4	Not a hot spot well
	IR03MW225A	No	No	Yes	In Area E-4	Hot spot well
	IR03MW226A	No	No	Yes	In Area E-4	Hot spot well
	IR03MW228B	No	No	No	Not related to the affected areas	Groundwater in B-aquifer is not contaminated in this area.
	IR03MW342A	No	No	No	In Area E-4	Not a hot spot well
	IR03MW0-1	No	No	Yes	In Area E-4	Hot spot well
	IR03MW0-2	No	No	No	In Area E-4	Not a hot spot well
	IR03MW0-3	No	No	No	In Area E-4	Not a hot spot well
IR-04	IR04MW09A	No	No	Yes	Upgradient of Area E-2	No contaminant was detected.
	IR04MW13A	No	No	Yes	In Area E-2	Hot spot well
	IR04MW31A	No	No	Yes	Upgradient of Area E-2	No contaminant was detected.
	IR04MW35A	No	No	No	In Area E-2	Not a hot spot well
	IR04MW36A	No	No	No	In Area E-2	Not a hot spot well
	IR04MW37A	No	No	No	In Area E-2	Not a hot spot well
	IR04MW38A	No	No	No	Cross-gradient of Area E-2	No contaminant was detected and not on bay front.
	IR04MW39A	No	No	Yes	Downgradient of Area E-2	No contaminant was detected and not on bay front.
	IR04MW40A	No	No	Yes	Upgradient of Area E-2	No contaminant was detected and not on bay front.
IR-05	IR05MW73A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR05MW74A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 12 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL E
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-05	IR05MW76A	No	No	No	In Area E-2	Not a hot spot well
	IR05MW77A	No	No	Yes	Downgradient of Area E-2	No contaminant was detected and not on bay front.
	IR05MW82A	No	No	Yes	Downgradient of Area E-2	No contaminant was detected and not on bay front.
	IR05MW85A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-11	IR11MW25A	No	No	Yes	In Area E-5	Hot spot well
	IR11MW26A	No	No	No	In Area E-5	Not a hot spot well
	IR11MW27A	No	No	Yes	In Area E-5	Hot spot well
IR-12	IR12MW11A	No	No	Yes	Upgradient of Area E-2	No contaminant was detected.
	IR12MW12A	No	No	No	Cross-gradient of Area E-2	No contaminant was detected.
	IR12MW13A	No	No	No	In Area E-2	Not a hot spot well
	IR12MW14A	No	No	No	In Area E-2	Not a hot spot well
	IR12MW15A	No	No	Yes	Downgradient of Area E-2	No contaminant was detected, and not on bay front.
	IR12MW16A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR12MW17A	No	No	No	In Area E-2	Not a hot spot well
	IR12MW18A	No	No	No	In Area E-2	Not a hot spot well
	IR12MW19A	No	No	No	In Area E-2	Not a hot spot well
	IR12MW20A	No	No	Yes	Downgradient of Area E-2	No contaminant was detected, and not on bay front.
	IR12MW21A	No	No	Yes	In Area E-2	Hot spot well
	IR13MW10A	No	No	Yes	Upgradient of Area D-5	No contaminant was detected
IR-13	IR13MW11A	No	No	Yes	In Area E-3	Area E-3 is defined by this well.
	IR13MW12A	No	No	No	Cross-gradient of Area E-3	No contaminant was detected, and not on bay front.
	IR14MW09A	No	No	Yes	Downgradient of Area E-5	No contaminant was detected.
IR-14	IR14MW10A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR14MW12A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
	IR14MW13A	No	No	Yes	In Area E-5	Hot spot well
IR-15	IR15MW06A	No	No	No	In Area E-5	Not a hot spot well
	IR15MW07A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

TABLE 12 (continued)

SELECTION OF MONITORING WELLS FOR PARCEL E
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Site	Well Name	Quarterly Monitoring	Semiannual Monitoring	Annual Monitoring	Relation to Contaminant Affected Area	Comments
IR-15	IR15MW08A	No	No	Yes	In Area E-5	Hot spot well
	IR15MW09F	No	No	No	Not related to the affected areas	Groundwater in the B-aquifer is not contaminated in this area.
	IR15MW10F	No	No	No	Not related to the affected areas	Groundwater in the B-aquifer is not contaminated in this area.
IR-39	PA39MW03A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.
IR-50	PA50MW10A	No	No	Yes	Not related to the affected areas	In the center of groundwater depression that may be caused by groundwater infiltrating the sanitary sewer system in this area
IR-56	IR56MW39A	No	No	No	Not related to the affected areas	Groundwater is not contaminated in this area.

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TABLE 13

**SAMPLE CONTAINER, HOLDING TIME, AND PRESERVATIVE
REQUIREMENTS FOR WATER SAMPLES
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

Parameter	Method Number ^a	Sample Container ^b	Sample Volume ^c	Preservatives	Holding Time ^d
ORGANIC ANALYSES:					
Volatile Organic Compounds (VOC)	Modified CLP	V	80 mL	HCl to pH < 2, 4 °C	14 days
Semivolatile Organic Compounds (SVOC)	CLP	G	2L	Cool, 4 °C	7 days/40 days
Organochlorine Pesticides and Polychlorinated Biphenyls (PCB)	CLP	G	2L	Cool, 4 °C	7 days/40 days
Total Petroleum Hydrocarbons-Purgeable	CA LUFT & EPA 8015A	V	80 mL	HCl to pH < 2, 4 °C	14 days
Total Petroleum Hydrocarbons-Extractable	CA LUFT & EPA 8015A	G	2L	Cool, 4 °C	7 days/40 days
INORGANIC ANALYSES:					
Metals	CLP	P	1L	HNO ₃ to pH < 2	Hg, 28 days; others, 6 months
Hexavalent Chromium	EPA 7196A	P,G	200 mL	Cool, 4 °C	24 hours

Notes:

^a EPA Contract Laboratory Program (CLP) Statement of Work for Inorganic Analyses, 1993, ILM03.0 and EPA CLP Statement of Work for Organic Analyses, 1993, OLM02.1

CA LUFT = California Leaking Underground Fuel Tank Manual, 1989

^b Container Types: G = Amber glass with Teflon-lined lid, sized according to sample volume
 P = Polyethylene container sized according to sample volume
 V = VOC (VOA) vial with Teflon-lined septum, 40 mL size

^c L = liter

mL = milliliter

^d "x" days/"y" days refers to the maximum number of days from sampling to extraction/the maximum number of days from extraction to analysis.

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APPENDIX A

**GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

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TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
B	IR-06	IR06MW22A	12	4	9.0	10.68	10.08	0.5 - 2.0	2.0 - 3.0	4.0 - 9.0	0.02	3.0 - 9.0	RMC Lonestar #2/16
		IR06MW23A	12	4	13.0	10.44	9.77	1.0 - 2.0	2.0 - 4.0	5.0 - 13.0	0.02	4.0 - 14.0	RMC Lonestar #2/16
		IR06MW27A	12	4	9.2	10.18	11.75	0 - 1.0	1.0 - 2.0	2.5 - 9.2	0.02	2.0 - 9.0	RMC Lonestar #2/16
		IR06MW30A	12	4	17.0	10.43	9.87	1.0 - 3.5	3.5 - 5.0	7.0 - 17.0	0.02	5.0 - 19.0	RMC Lonestar #2/16
		IR06MW32A	12	4	14.0	10.60	10.02	0.6 - 4.0	4.0 - 5.0	6.5 - 14.0	0.02	5.0 - 14.0	RMC Lonestar #2/16
		IR06MW34A	12	4	12.0	11.03	10.38	0.5 - 4.0	4.0 - 5.0	7.0 - 12.0	0.02	5.0 - 12.5	RMC Lonestar #3 & #2/16
		IR06MW35A	12	4	15.0	10.31	9.77	1.0 - 3.0	3.0 - 4.0	6.0 - 15.0	0.02	4.0 - 16.0	RMC Lonestar #2/16
		IR06MW40A	12	4	20.5	10.66	10.10	1.0 - 4.0	4.0 - 5.0	7.0 - 20.5	0.02	5.0 - 20.5	RMC Lonestar #3
		IR06MW41A	12	4	17.0	10.38	9.77	1.0 - 4.0	4.0 - 6.0	7.0 - 17.0	0.02	6.0 - 17.5	RMC Lonestar #3
		IR06MW42A	12	4	13.5	12.39	11.88	1.0 - 4.0	4.0 - 6.0	8.5 - 13.5	0.02	6.0 - 14.0	RMC Lonestar #2/16
		IR06MW44A	11	4	15.0	10.27	9.68	1.0 - 2.5	2.5 - 4.0	5.0 - 15.0	0.02	4.0 - 16.0	RMC Lonestar #2/16
		IR06MW45A	11	4	14.0	10.63	9.93	1.0 - 2.0	2.0 - 3.0	4.0 - 14.0	0.02	3.0 - 14.0	RMC Lonestar #2/16
		IR06MW46A	11	4	17.0	10.07	9.49	1.0 - 3.5	3.5 - 5.0	7.0 - 17.0	0.02	5.0 - 17.0	RMC Lonestar #2/16
		IR06MW47F	9.9	4	40.0	10.21	9.68	1.0 - 24.0	24.0 - 28.0	30.0 - 40.0	0.02	28.0 - 41.0	RMC Lonestar #3
		IR06MW48F	9.9	4	20.0	10.60	10.03	0.5 - 8.0	8.0 - 9.0	10.0 - 20.0	0.02	9.0 - 20.5	RMC Lonestar #3
		IR06MW49F	9.9	4	19.0	11.94	11.29	0 - 3.0	3.0 - 5.0	9.0 - 19.0	0.02	5.0 - 19.5	RMC Lonestar #3
		IR06MW50F	10	4	30.5	11.27	10.4	0 - 16.0	16.0 - 18.0	20.0 - 30.0	0.02	19.0 - 31.0	RMC Lonestar #3
		IR06MW51F	10	4	37.5	10.76	10.19	0 - 23.0	23.0 - 25.0	27.0 - 37.0	0.02	25.0 - 37.5	RMC Lonestar #3 & #60
		IR06MW52F	10	4	29.5	10.42	9.84	0.5 - 15.0	15.0 - 17.0	19.0 - 29.0	0.02	17.0 - 30.0	RMC Lonestar #3 & #60
		IR06MW53F	10	4	24.5	10.88	10.51	0.5 - 8.5	8.5 - 11.5	14.0 - 24.0	0.02	11.5 - 24.5	RMC Lonestar #2/16
		IR06MW54F	10	4	52.5	35.86	35.02	0.5 - 38.0	38.0 - 40.0	42.0 - 52.0	0.02	40.0 - 53.0	RMC Lonestar #3 & #60
		IR06MW55F	10	4	46.5	32.94	32.34	0.5 - 30.5	30.5 - 32.5	36.0 - 46.0	0.02	32.5 - 46.5	RMC Lonestar #3 & #60
		IR06MW56F	10	4	44.0	26.03	25.04	0.5 - 29.5	29.5 - 31.5	33.5 - 43.5	0.02	31.5 - 44.0	RMC Lonestar #3 & #60
		IR06MW57F	10	4	40.5	28.64	28.02	2.5 - 24.5	24.5 - 27.0	30.0 - 40.5	0.02	27.0 - 41.0	RMC Lonestar #3
		IR06MW58F	10	4	38.5	26.56	25.91	2.5 - 23.0	23.0 - 25.0	28.0 - 38.0	0.02	25.0 - 39.0	RMC Lonestar #3
IR-07		IR07MW19A	12	4	16.0	10.13	9.60	1.0 - 3.5	3.5 - 4.5	6.0 - 16.0	0.02	4.5 - 16.0	RMC Lonestar #2/16
		IR07MW20A1	12	4	24.0	10.06	9.65	1.5 - 3.0	3.0 - 4.5	6.0 - 24.0	0.02	4.5 - 24.0	RMC Lonestar #2/16
		IR07MW20A2	12	4	44.0	10.23	9.27	0.9 - 35.0	35.0 - 37.0	39.0 - 44.0	0.02	37.0 - 44.0	RMC Lonestar #2/16
		IR07MW21A1	12	4	16.0	13.09	14.65	0 - 3.0	3.0 - 4.0	6.0 - 16.0	0.02	4.0 - 16.0	RMC Lonestar #2/16
		IR07MW21A2	12	4	34.0	12.89	14.42	0 - 25.0	25.0 - 27.5	29.0 - 34.0	0.02	27.5 - 34.0	RMC Lonestar #3
		IR07MW23A	12	4	17.0	16.40	15.76	0.7 - 2.8	2.8 - 4.8	7.0 - 17.0	0.02	4.8 - 17.0	RMC Lonestar #2/16
		IR07MWP-1	8	2	19.0	9.85	9.87	0 - 1.5	1.5 - 2.5	4.0 - 19.0	0.01	2.5 - 19.0	12x20 sand
		IR07MWP-2	8	2	19.0	10.04	9.77	0 - 1.5	1.5 - 2.5	4.0 - 19.0	0.01	2.5 - 19.0	12x20 sand
		IR07MWS-1	8	2	18.0	10.63	10.25	0 - 3.0	3.0 - 4.0	5.0 - 18.0	0.01	4.0 - 13.0	12x20 sand
		IR07MWS-2	8	2	20.5	9.68	9.13	0 - 1.0	1.0 - 2.0	3.0 - 18.0	0.01	2.0 - 29.0	12x20 sand
		IR07MWS-3	8	2	20.0	10.31	9.75	0 - 2.5	2.5 - 3.5	5.0 - 20.0	0.01	3.5 - 20.0	12x20 sand
		IR07MWS-4	8	2	21.0	13.25	13.22	0 - 3.0	3.0 - 4.0	6.0 - 21.0	0.01	4.0 - 32.5	12x20 sand
		IR07P20A	8	2	25.0	10.25	9.57	0.5 - 3.0	3.0 - 4.0	5.0 - 25.0	0.02	4.0 - 25.0	RMC Lonestar #2/16
IR-10		IR10MW12A	10	4	18.0	9.77	9.07	0 - 1.0	1.0 - 2.0	3.0 - 18.0	0.01	2.0 - 19.0	RMC Lonestar #3
		IR10MW13A1	10	4	20.0	10.31	9.90	0 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.0	RMC Lonestar #3
		IR10MW13A2	10	4	40.0	10.22	9.96	0 - 21.5	21.5 - 23.0	25.0 - 40.0	0.02	23.0 - 40.0	RMC Lonestar #3
		IR10MW14A	11	4	20.0	10.64	10.24	0.5 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.5	RMC Lonestar #3
		IR10MW15A	10	4	18.0	10.09	9.70	0.25 - 1.5	1.5 - 3.0	5.0 - 18.0	0.01	3.0 - 18.0	RMC Lonestar #3
		IR10MW28A	7	2	17.0	14.21	13.65	1.0 - 3.5	3.5 - 5.0	7.0 - 17.0	0.02	5.0 - 17.0	RMC Lonestar #2/16
		IR10MW29A1	11	4	15.0	9.88	9.25	1.0 - 2.7	2.7 - 4.0	5.0 - 15.0	0.02	4.0 - 15.0	RMC Lonestar #2/16
		IR10MW29A2	11	4	58.6	9.69	9.04	1.0 - 44.0	44.0 - 47.0	48.6 - 58.6	0.02	47.0 - 60.5	RMC Lonestar #2/16

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
B	IR-10	IR10MW31A1	10	4	20.5	10.57	9.86	0.5 - 2.0	2.0 - 3.5	5.0 - 20.0	0.02	3.5 - 21.0	RMC Lonestar #2/16
		IR10MW31A2	10	4	40.5	10.54	9.96	0.5 - 20.0	20.0 - 23.0	25.0 - 40.0	0.02	23.0 - 41.0	RMC Lonestar #2/16
		IR10MW32A	10	4	21.0	10.21	9.81	1.0 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR10MWP15A	8	2	15.0	9.76	9.06	1.0 - 2.5	2.5 - 4.0	5.0 - 15.0	0.02	4.0 - 15.0	RMC Lonestar #2/16
IR-18	IR-18	IR18MW21A	10	4	27.0	17.69	17.11	1.5 - 7.5	7.5 - 10.0	12.0 - 27.0	0.02	10.0 - 27.0	RMC Lonestar #2/16
		IR18MW22A	10	4	27.0	18.80	18.11	1.5 - 7.25	7.25 - 9.5	12.0 - 27.0	0.02	9.5 - 27.0	RMC Lonestar #2/16
		PA18MW08A	11	4	25.0	25.12	24.67	0.5 - 6.0	6.0 - 7.8	10.0 - 25.0	0.02	7.8 - 25.0	RMC Lonestar #2/16
		PA18MW09A	11	4	25.0	18.03	17.66	1.0 - 5.0	5.0 - 7.0	10.0 - 25.0	0.02	7.0 - 25.0	RMC Lonestar #2/16
IR-20	IR-20	IR20MW01A	6	2	18.0	9.42	8.31	0 - 2.0	2.0 - 3.0	4.0 - 18.0	0.02	3.0 - 18.0	RMC Lonestar #2/16
		IR20MW06A	10	4	23.0	10.40	9.85	1.0 - 2.5	2.5 - 5.5	8.0 - 23.0	0.02	5.5 - 24.0	RMC Lonestar #2/16
		IR20MW11A	10	4	19.0	10.96	10.52	0.5 - 2.0	2.0 - 4.0	6.0 - 19.0	0.02	4.0 - 20.0	RMC Lonestar #2/16
		IR20MW17A	10	4	22.0	10.79		2.0 - 4.0	4.0 - 5.5	7.0 - 22.0	0.02	5.5 - 23.0	RMC Lonestar #2/16
IR-24	PA-24	PA24MW01A	10	4	26.0	9.42	10.12	0.5 - 2.5	2.5 - 4.0	6.0 - 26.0	0.02	4.0 - 26.8	RMC Lonestar #2/16
		PA24MW02A	10	4	21.5	10.03	9.43	1.0 - 3.4	3.4 - 4.5	6.0 - 21.5	0.02	4.5 - 22.5	RMC Lonestar #2/16
		PA24MW03A	10	4	26.0	10.56	9.97	0.5 - 2.5	2.5 - 4.0	6.0 - 26.0	0.02	4.0 - 27.0	RMC Lonestar #2/16
IR-25	IR-25	IR25MW11A	8	2	20.0	11.06	10.45	0.5 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.5	RMC Lonestar #2/16
		IR25MW15A1	8	2	13.5	7.69	7.84	0 - 1.5	1.5 - 3.0	3.5 - 13.5	0.02	3.0 - 15.0	RMC Lonestar #2/16
		IR25MW15A2	8	2	30.0	7.17	7.38	0.5 - 15.0	15.0 - 18.0	20.0 - 30.0	0.02	18.0 - 30.0	RMC Lonestar #3
		IR25MW16A	10	4	21.5	11.62	11.08	0.5 - 3.0	3.0 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR25MW17A	10	4	21.0	10.79	10.28	1.0 - 3.0	3.0 - 4.0	5.5 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
IR-26	IR-26	IR26MW36A	10	4	17.5	7.57	8.28	0.5 - 2.5	2.5 - 4.5	5.5 - 17.5	0.02	4.5 - 18.0	RMC Lonestar #2/16
		IR26MW40A	10	4	26.5	10.48	9.89	0.5 - 2.0	2.0 - 4.0	6.0 - 26.0	0.02	4.0 - 26.5	RMC Lonestar #2/16
		IR26MW41A	10	4	21.0	10.75	10.12	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
IR-46	IR-46	IR46MW37A	10	4	21.0	10.6	9.56	1.5 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR46MW38A	10	4	21.0	10.39	9.82	1.0 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 21.0	RMC Lonestar #2/16
		IR46MW39A	10	4	21.0	10.15	9.73	0.5 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR46MW39A2	10	4	31.5	10	9.32	1.0 - 22.0	22.0 - 24.5	26.0 - 31.0	0.02	24.5 - 32.5	RMC Lonestar #2/16
		IR46MW39A3	10	4	41.5	10.11	9.47	1.0 - 32.0	32.0 - 34.5	36.0 - 41.0	0.02	34.5 - 42.0	RMC Lonestar #2/16
		IR46MW40A	10	4	21.0	10.13	9.39	0.5 - 3.5	3.5 - 4.5	5.5 - 21.0	0.02	4.5 - 21.5	RMC Lonestar #3
		IR46MW40A2	10	4	31.5	9.99	9.33	0.5 - 22.0	22.0 - 24.5	26.0 - 31.0	0.02	24.5 - 32.5	RMC Lonestar #2/16
		IR46MW40A3	10	4	41.0	9.97	9.28	0.5 - 32.0	32.0 - 34.2	36.0 - 41.0	0.02	34.2 - 42.5	RMC Lonestar #2/16
		IR46MW41A	10	4	21.5	10.23	9.54	0.5 - 3.0	3.0 - 5.0	6.0 - 21.0	0.02	5.0 - 22.0	RMC Lonestar #2/16
		IR46MW42A	10	4	21.5	10.21	9.53	0.5 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR46MW43A	10	4	21.0	9.75	9.03	0.5 - 3.0	3.0 - 5.0	6.0 - 21.0	0.02	5.0 - 22.5	RMC Lonestar #2/16
		IR46P38AA	10	2	31.5	10.04	10.68	0.5 - 3.0	3.0 - 4.5	6.0 - 31.0	0.02	4.5 - 32.0	RMC Lonestar #2/16
		IR46P38AB	10	2	21.5	10.6	10.75	1.0 - 3.0	3.0 - 4.5	6.0 - 21.0	0.02	4.5 - 22.5	RMC Lonestar #2/16
IR-50	PA-50	PA50MW01A	10	4	16.2	9.68	9.14	1.0 - 2.5	2.5 - 4.5	6.0 - 16.2	0.02	4.5 - 17.0	RMC Lonestar #2/16
		PA50MW02A	10	4	16.0	8.41	7.80	1.0 - 2.0	2.0 - 4.0	6.0 - 16.0	0.02	4.0 - 17.0	RMC Lonestar #2/16
UT-02	UT-02	UT02MW15A	10	4	19.5	11.18	12.57	0.5 - 2.5	2.5 - 3.5	4.5 - 19.5	0.02	3.5 - 20.0	RMC Lonestar #2/16
		UT02MW16A	10	4	20.0	10.66	9.91	1.0 - 2.5	2.5 - 3.5	4.5 - 19.5	0.02	3.5 - 20.5	RMC Lonestar #2/16

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
B	UT-02	UT02MW17A	10	4	15.5	9.44	10.12	1.0 - 3.0	3.0 - 4.0	5.0 - 15.0	0.02	4.0 - 15.5	RMC Lonestar #2/16
	UT-03	UT03MW10A	10	4	15.0	11.02	10.6	0.5 - 3.0	3.0 - 4.2	5.0 - 14.5	0.02	4.2 - 15.0	RMC Lonestar #2/16
		UT03MW11A	10	4	20.5	10.7	9.93	1.0 - 3.0	3.0 - 3.9	5.0 - 20.0	0.02	3.9 - 21.0	RMC Lonestar #2/16
		UT03MW12A	10	4	21.5	10.83	10.02	1.0 - 3.0	3.0 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
C	IR-28	IR28MW122A	10	4	21.5	7.96	7.47	1.0 - 3.5	3.5 - 4.5	6.0 - 21.5	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW123A	10	4	21.0	8.34	7.95	1.5 - 3.5	3.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW124A	10	4	21.0	8.03	7.08	1.0 - 2.0	2.0 - 4.0	5.5 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR28MW125A	10	4	17.5	8.75	7.86	1.0 - 2.5	2.5 - 4.0	5.5 - 17.5	0.02	4.0 - 18.0	RMC Lonestar #2/16
		IR28MW126A	10	4	21.0	8.42	7.72	1.0 - 2.0	2.0 - 4.0	5.5 - 21.0	0.02	4.0 - 21.0	RMC Lonestar #2/16
		IR28MW127A	10	4	21.5	8.61	7.6	1.0 - 2.2	2.2 - 4.5	6.0 - 21.5	0.02	4.5 - 23.0	RMC Lonestar #2/16
		IR28MW128A	10	4	17.5	8.63	8.11	1.0 - 2.0	2.0 - 4.0	5.5 - 17.5	0.02	4.0 - 19.0	RMC Lonestar #2/16
		IR28MW129A	10	4	21.5	9.45	8.83	1.0 - 2.5	2.5 - 4.5	6.0 - 21.5	0.02	4.5 - 22.5	RMC Lonestar #2/16
		IR28MW136A	12	4	15.5	8.01	7.49	1.0 - 3.0	3.0 - 4.5	5.0 - 15.5	0.02	4.5 - 16.0	RMC Lonestar #2/16
		IR28MW140F	10	4	44.5	8.12	7.56	1.0 - 23.0	23.0 - 26.0	29.0 - 44.5	0.02	26.0 - 45.0	RMC Lonestar #2/16
		IR28MW149A	10	4	21.5	9.61	8.93	1.0 - 2.0	2.0 - 4.0	6.0 - 21.5	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR28MW150A	10	4	21.5	8.37	8.14	1.0 - 2.5	2.5 - 4.5	6.0 - 21.5	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW151A	10	4	21.5	9.11	8.5	1.0 - 2.5	2.5 - 4.5	6.0 - 21.5	0.02	4.5 - 21.5	RMC Lonestar #2/16
		IR28MW155A	12	4	21.5	9.22	8.6	1.0 - 3	3.0 - 4.5	6.0 - 21.5	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW169A	12	4	21.5	10.21	9.69	1.0 - 3	3.0 - 4.5	6.0 - 21.5	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW170A	10.25	4	20.5	9.05	8.67	1.4 - 2.0	2.0 - 4.0	5.4 - 20.5	0.02	4.0 - 21.5	RMC Lonestar #2/16
		IR28MW171A	10	4	21.5	7.57	6.69	1.0 - 2.5	2.5 - 4.5	6.0 - 21.5	0.02	4.5 - 22.0	RMC Lonestar #2/16
		IR28MW172F	10	4	67.0	9.47	8.59	1.0 - 51.0	51.0 - 55.0	57.0 - 67.0	0.02	55.0 - 68.0	RMC Lonestar #2/16
		IR28MW173B	10	4	59.5	9.09	8.07	1.5 - 44.0	44.0 - 48.0	49.5 - 59.5	0.02	48.0 - 61.0	RMC Lonestar #2/16
		IR28MW188F	10	4	22.0	10.42	9.64	1.0 - 5.0	5.0 - 7.0	8.5 - 22.0	0.02	7.0 - 22.0	RMC Lonestar #2/16
		IR28MW189F	10	4	17.5	9.51	8.87	1.0 - 3.5	3.5 - 5.5	7.5 - 17.5	0.02	5.5 - 18.0	RMC Lonestar #2/16
		IR28MW190F	10	4	16.3	10.26	10.06	0.5 - 9.5	9.5 - 11.5	13.0 - 16.3	0.02	11.5 - 16.3	RMC Lonestar #2/16
		IR28MW200A	12	4	16.0	8.83	8.31	1.0 - 2.5	2.5 - 4.5	5.5 - 16.0	0.02	4.5 - 16.0	RMC Lonestar #2/16
		IR28MW201F				8.85	8.03						
		IR28MW211F	10.25	4	16.5	9.08	8.57	1.0 - 3.0	3.0 - 5.0	6.0 - 16.5	0.02	5.0 - 17.0	RMC Lonestar #2/16
		IR28MW216F	10	4	28.5	9.08	8.38	1.0 - 13.0	13.0 - 15.7	18.0 - 28.5	0.02	15.7 - 30.5	RMC Lonestar #2/16
		IR28MW217A	10	4	20.0	9.56	8.98	1.0 - 3.0	3.0 - 5.0	6.0 - 20.0	0.02	5.0 - 21.5	RMC Lonestar #2/16
		IR28MW255F	10	4	55.5	8.38	7.76	1.0 - 34.0	34.0 - 37.0	40.0 - 55.5	0.02	37.0 - 56.0	RMC Lonestar #2/16
		PA28MW50A	10	4	20.0	9.08	8.60	1.0 - 2.9	2.9 - 3.9	5.0 - 20.0	0.02	3.9 - 20.5	RMC Lonestar #2/16
		PA28MW51A	10	4	26.5	8.76	8.39	1.0 - 2.5	2.5 - 4.5	6.0 - 26.5	0.02	4.5 - 27.0	RMC Lonestar #2/16
		PA28MW52A	10	4	21.0	8.99	8.58	1.0 - 2.5	2.5 - 4.5	6.0 - 21.0	0.02	4.5 - 21.5	RMC Lonestar #2/16
IR-29		IR29MW48A	10	4	10.0	8.69	8	1.0 - 2.5	2.5 - 3.5	4.5 - 10.0	0.02	3.5 - 11.0	RMC Lonestar #2/16
		IR29MW56F	10	4	15.0	8.65	8.27	1.0 - 2.5	2.5 - 4.0	6.0 - 15.0	0.02	4.0 - 15.5	RMC Lonestar #2/16
		IR29MW57A	10	4	11.0	8.21	7.52	1.0 - 2.0	2.0 - 4.0	5.0 - 11.0	0.02	4.0 - 11.5	RMC Lonestar #2/16
		IR29MW58F				9.2	8.65						
		IR29MW59F	10	4	25.5	8.53	8.21	2.0 - 10.0	10.0 - 13.0	15.0 - 25.0	0.02	13.0 - 26.0	RMC Lonestar #2/16
		IR29MW72F	10	4	26.5	9.69	9.27	1.0 - 2.0	2.0 - 4.0	6.0 - 26.0	0.02	4.0 - 26.5	RMC Lonestar #2/16
IR-50		IR50MW13A											
		IR50MW13F	10	4	16.5	8.28	7.8	0.5 - 2.0	2.0 - 4.0	6.0 - 16.0	0.02	4.0 - 17.0	RMC Lonestar #2/16
		PAS0MW03A	10	4	14.5	7.37	6.85	none	0.5 - 3.35	4.5 - 14.5	0.02	3.35 - 14.5	RMC Lonestar #2/16

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout/Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
C	IR-50	PAS0MW04A	10	4	13.0	8.07	7.49	1.0 - 2.5	2.5 - 3.5	4.5 - 13.0	0.02	3.5 - 13.0	RMC Lonestar #2/16
	IR58	IR58MW24F	10	4	23.5	14.18	15.48	0 - 8.5	8.5 - 11.0	13.0 - 23.5	0.02	11.0 - 23.5	RMC Lonestar #2/16
		IR58MW25F	10	4	27.5	10.49	9.82	1.0 - 13.0	13.0 - 15.0	17.0 - 27.5	0.02	15.0 - 27.5	RMC Lonestar #2/16
		IR58MW26A	12	4	21.5	8.83	8.25	1.0 - 2.5	2.5 - 4.5	6.0 - 21.5	0.02	4.5 - 22.5	RMC Lonestar #2/16
		IR58MW31A	10	4	15.5	9.58	8.93	1.0 - 2.0	2.0 - 4.0	5.0 - 15.5	0.02	4.0 - 15.5	RMC Lonestar #2/16
D	IR-08	IR08MW37A	10	4	22.0	4.50	4.25	1.0 - 3.5	3.5 - 5.0	7.0 - 22.0	0.02	5.0 - 22.0	RMC Lonestar #3
		IR08MW38A	10	4	24.5	7.17	6.91	0.5 - 3.5	3.5 - 5.0	6.5 - 24.5	0.02	5.0 - 24.5	RMC Lonestar #3
		IR08MW39A	10	4	36.0	5.44	5.05	1.0 - 3.5	3.5 - 5.0	6.0 - 36.0	0.02	5.0 - 36.0	RMC Lonestar #3
		IR08MW40A	10	4	28.0	6.05	5.41	1.0 - 5.0	5.0 - 7.0	8.0 - 28.0	0.02	7.0 - 28.0	RMC Lonestar #2/16
		IR08MW41A	10	4	25.5	6.96	6.34	1.0 - 3.0	3.0 - 4.5	5.5 - 25.5	0.02	4.5 - 26.0	RMC Lonestar #3
		IR08MW42A	11	4	20.5	4.72	4.15	1.0 - 5.0	5.0 - 8.5	10.5 - 20.5	0.02	8.5 - 20.5	RMC Lonestar #2/16
		IR08MW43A	10	4	21.5	8.62	8.82	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR08MW44A	10	4	21.5	6.44	5.91	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR08MW-6				5.8	4.88						
		IR08P39A				5.3	4.91						
	IR-09	IR09MW31A	10	4	13.0	9.11	8.49	1.0 - 3.5	3.5 - 5.0	7.0 - 12.0	0.02	5.0 - 12.0	RMC Lonestar #2/16
		IR09MW35A	10	4	20.0	9.40	8.72	0.5 - 4.0	4.0 - 5.2	8.0 - 19.0	0.02	5.2 - 20.0	RMC Lonestar #2/16
		IR09MW36A	10	4	22.0	9.40	8.85	1.0 - 7.0	7.0 - 9.0	11.0 - 21.0	0.02	9.0 - 21.0	RMC Lonestar #2/16
		IR09MW37A	10	4	15.0	9.66	9.04	0.5 - 3.5	3.5 - 5.0	7.5 - 14.0	0.02	5.0 - 14.0	RMC Lonestar #2/16
		IR09MW38A	10	4	13.5	9.48	9.00	0.5 - 4.0	4.0 - 5.5	7.5 - 12.5	0.02	5.5 - 9.7	RMC Lonestar #2/16
		IR09MW39A	9	4	23.1	8.85	8.16	1.0 - 10.0	10.0 - 12.5	13.1 - 23.1	0.02	12.5 - 23.5	RMC Lonestar #2/16
		IR09MW44A	11	4	17.5	9.26	8.78	0.5 - 3.0	3.0 - 6.0	7.5 - 17.5	0.02	6.0 - 18.5	RMC Lonestar #2/16
		IR09MW45F	10.25	4	17.5	8.88		0.5 - 3.0	3.0 - 5.0	7.0 - 17.0	0.02	5.0 - 20.0	RMC Lonestar #3
		IR09PPY1				9.04	8.78						
		IR09P35AA	8	2	25.0	9.41	8.75	0.5 - 3.0	3.0 - 4.0	5.0 - 25.0	0.02	4.0 - 25.0	RMC Lonestar #2/16
		IR09P35AB	8	2	25.0	9.37	8.76	0 - 3.0	3.0 - 4.0	5.0 - 25.0	0.02	4.0 - 25.0	RMC Lonestar #2/16
		IR09P40A	9	2	15.8	9.46	9.05	1.0 - 8.5	8.5 - 9.8	10.8 - 15.8	0.02	9.8 - 16.0	RMC Lonestar #2/16
		IR09P41A	9	2	17.0	9.44	8.86	1.0 - 8.0	8.0 - 10.0	12.0 - 17.0	0.02	10.0 - 17.0	RMC Lonestar #2/16
		IR09P42A	9	2	40.0	9.46	8.91	1.0 - 31.0	31.0 - 32.9	35.0 - 40.0	0.02	32.9 - 40.0	RMC Lonestar #2/16
		IR09P43A	9	2	15.1	9.48	8.96	1.0 - 6.5	6.5 - 8.0	10.1 - 15.1	0.02	8.0 - 16.5	RMC Lonestar #2/16
	IR-16	PA16MW16A	11	4	20.0	8.88	8.58	1.0 - 2.75	2.75 - 4.0	5.0 - 20.0	0.02	4.0 - 20.0	RMC Lonestar #2/16
		PA16MW17A	11	4	16.5	8.68	8.51	1.0 - 2.0	2.0 - 3.0	4.0 - 16.5	0.02	3.0 - 16.5	RMC Lonestar #2/16
		PA16MW18A	11	4	20.3	8.79	8.36	1.0 - 3.0	3.0 - 4.0	5.3 - 20.3	0.02	4.0 - 20.3	RMC Lonestar #2/16
	IR-17	IR17MW11A	11	4	17.3	8.56	7.85	0.75 - 2.0	2.0 - 3.0	4.3 - 17.3	0.02	3.0 - 17.3	RMC Lonestar #2/16
		IR17MW12A	11	4	17.3	8.54	7.72	0.75 - 2.0	2.0 - 3.0	4.5 - 17.3	0.02	3.0 - 17.3	RMC Lonestar #2/16
		IR17P12AA	8	2	20.0	8.42	9.59	0 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.0	RMC Lonestar #2/16
		IR17P12AB	8	2	20.0	8.54	9.82	0 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.0	RMC Lonestar #2/16
		IR17MW13A	11	4	17.5	7.86	6.98	0.75 - 2.0	2.0 - 3.0	4.5 - 17.5	0.02	3.0 - 17.5	RMC Lonestar #2/16
	IR-22	IR22MW07A	10	4	22.0	8.37	7.61	1.0 - 3.0	3.0 - 5.0	7.0 - 22.0	0.02	5.0 - 24.0	RMC Lonestar #2/16
		IR22MW08A	10	4	21.0	9.44	8.82	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR22MW15A	10	4	22.0	10.83	8.93	1.0 - 2.0	2.0 - 4.5	7.0 - 22.0	0.02	4.5 - 24.0	RMC Lonestar #2/16
		IR22MW16A	10	4	22.0	8.39	7.89	1.0 - 3.0	3.0 - 5.0	7.0 - 22.0	0.02	5.0 - 23.0	RMC Lonestar #2/16

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
D	SI-32	PA32MW04A	10	4	26.0	7.44	6.96	0.5 - 1.5	1.5 - 3.0	5.5 - 25.5	0.02	3.0 - 26.0	RMC Lonestar #2/16
IR-33	IR33MW61A	9.5	4	18.0	9.81	12.23	0 - 2.0	2.0 - 3.0	3.5 - 18.0	0.02	3.0 - 18.5	RMC Lonestar #2/16	
	IR33MW62A	10	4	15.0	8.19	8.6	0.5 - 2.5	2.5 - 4.0	5.0 - 15.0	0.02	4.0 - 16.0	RMC Lonestar #2/16	
	IR33MW63A	10	4	21.5	8.43	7.83	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	IR33MW64A	10	4	12.0	9.14	9.36	0 - 2.0	2.0 - 4.0	6.0 - 12.0	0.02	4.0 - 12.5	RMC Lonestar #2/16	
	IR33MW65A	10	4	16.5	8.89	8.28	1.0 - 2.0	2.0 - 4.0	6.0 - 16.0	0.02	4.0 - 17.0	RMC Lonestar #2/16	
	IR33MW66A	10	4	21.5	9.54	8.85	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	PA33MW36A	10	4	21.0	9.66	9.24	1.0 - 3.2	3.2 - 5.0	6.0 - 21.0	0.02	5.0 - 22.0	RMC Lonestar #2/16	
	PA33MW37A	10	4	21.0	9.63	9.27	1.0 - 2.8	2.8 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16	
IR-34	IR34MW01A	10	4	16.0	9.11	8.58	1.0 - 1.8	1.8 - 4.5	5.5 - 15.5	0.02	4.5 - 16.0	RMC Lonestar #2/16	
	IR34MW02A	10	4	21.5	8.72	8.11	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
IR-35	IR35MW01A	10	4	21.0	9.36	8.84	1.0 - 1.8	1.8 - 4.0	5.5 - 20.5	0.02	4.0 - 22.5	RMC Lonestar #2/16	
	PA35P01A	8.62	4	21.0			1.0 - 2.5	2.5 - 4.5	6.0 - 21.0	0.02	4.5 - 22.0	RMC Lonestar #2/16	
IR-36	IR36MW09A	10	4	21.0	5.48	4.9	0.5 - 2.0	2.0 - 4.0	5.5 - 20.5	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	IR36MW11A	10	4	21.5	9.09	8.51	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.5	RMC Lonestar #2/16	
	IR36MW12A	10	4	21.5	8.16	7.13	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	IR36MW13A	10	4	11.5	6.76	8.96	1.0 - 2.0	2.0 - 4.0	6.0 - 11.0	0.02	4.0 - 12.0	RMC Lonestar #2/16	
	IR36MW14A	10	4	16.5	5.97	5.42	1.0 - 2.0	2.0 - 4.0	6.0 - 16.0	0.02	4.0 - 16.5	RMC Lonestar #2/16	
	IR36MW15A	10	4	21.5	7.58	7.04	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	IR36MW16A	10	4	26.5	9.03	8.21	1.0 - 2.0	2.0 - 4.0	6.0 - 26.0	0.02	4.0 - 26.5	RMC Lonestar #2/16	
	IR36MW17A	10	4	21.5	8.79	8.25	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	PA36MW01A	10	4	21.5	8.18	7.64	1.0 - 2.5	2.5 - 4.0	6.0 - 21.5	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	PA36MW02A	10	4	21.5	8.52	8.01	1.0 - 2.5	2.5 - 3.5	6.0 - 21.5	0.02	3.5 - 22.0	RMC Lonestar #2/16	
	PA36MW03A	10	4	16.0	7.76	9.26	0 - 2.5	2.5 - 4.2	6.0 - 16.0	0.02	4.2 - 17.0	RMC Lonestar #2/16	
	PA36MW04A	10	4	21.0	7.86	7.32	1.0 - 3.0	3.0 - 4.0	5.5 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
	PA36MW05A	10	4	25.5	7.92	7.40	1.0 - 3.0	3.0 - 4.0	5.0 - 25.0	0.02	4.0 - 26.0	RMC Lonestar #2/16	
	PA36MW06A	10	4	26.0	9.55	8.94	0.5 - 3.0	3.0 - 4.0	6.0 - 26.0	0.02	4.0 - 27.0	RMC Lonestar #2/16	
	PA36MW07A	10	4	20.0	7.37	6.80	1.0 - 2.0	2.0 - 3.5	5.0 - 20.0	0.02	3.5 - 21.0	RMC Lonestar #2/16	
	PA36MW08A	10	4	21.0	8.31	7.69	0.5 - 2.4	2.4 - 4.3	6.0 - 21.0	0.02	4.3 - 21.5	RMC Lonestar #2/16	
IR-37	IR37MW01A	10	4	21.5	8.26	7.67	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16	
IR-38	IR38MW01A	10	4	34.5	5.27	4.26	0.5 - 10.0	10.0 - 12.0	14.0 - 34.0	0.02	12.0 - 36.5	RMC Lonestar #2/16	
	IR38MW02A	10	4	30.5	3.4	2.9	2.0 - 6.0	6.0 - 8.0	10.0 - 30.0	0.02	8.0 - 31.5	RMC Lonestar #2/16	
	IR38MW03A	10	4	21.5	4.68	3.98	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.5	RMC Lonestar #2/16	
IR-39	IR39MW21A	10	4	13.0	5.87	7.92	0 - 2.5	2.5 - 4.5	6.0 - 13.0	0.02	4.5 - 13.0	RMC Lonestar #2/16	
	IR39MW22A	9	4	20.5	6.88	6.28	1.0 - 2.0	2.0 - 4.0	5.4 - 20.4	0.02	4.0 - 21.0	RMC Lonestar #2/16	
	IR39MW23A	10	4	21.5	6.63	5.54	1.0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.5	RMC Lonestar #2/16	
	IR39MW24A	10	4	16.5	5.83	4.8	1.0 - 2.0	2.0 - 4.0	6.0 - 16.0	0.02	4.0 - 17.0	RMC Lonestar #2/16	
	PA39MW01A	10	4	26.0	5.08	4.61	1.0 - 4.0	4.0 - 5.0	6.0 - 26.0	0.02	5.0 - 27.0	RMC Lonestar #2/16	
	PA39MW02A	10	4	25.0	5.40	6.40	0 - 2.5	2.5 - 3.5	4.5 - 25.0	0.02	3.5 - 25.0	RMC Lonestar #2/16	
D	IR-50	IR50MW14A	12	4	22.0	7.49	6.86	1.0 - 3.0	3.0 - 4.0	6.25 - 21.5	0.02	4.0 - 22.5	RMC Lonestar #2/16

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HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
D	IR-50	IR50MW15A	10.25	4	20.8	7.36	6.89	.25 - 3.0	3.0 - 4.0	5.3 - 20.3	0.02	4.0 - 20.8	RMC Lonestar #2/16
		IR50MW05A	10	4	11.5	6.63	6.13	1.0 - 1.5	1.5 - 3.0	5.0 - 11.5	0.02	3.0 - 11.5	RMC Lonestar #2/16
		IR50MW06A	10	4	15.0	8.10	7.59	1.0 - 2.0	2.0 - 3.8	5.0 - 15.0	0.02	3.8 - 15.5	RMC Lonestar #2/16
		IR50MW07A	10	4	12.0	9.22	8.71	1.0 - 1.5	1.5 - 3.5	5.0 - 12.0	0.02	3.5 - 12.5	RMC Lonestar #2/16
		IR50MW08A	10	4	13.0	8.03	7.47	1.0 - 2.3	2.3 - 4.0	5.0 - 13.0	0.02	4.0 - 13.5	RMC Lonestar #2/16
		IR50MW09A	10	4	15.0	5.59	5.10	1.0 - 2.0	2.0 - 3.8	5.0 - 15.0	0.02	3.8 - 15.5	RMC Lonestar #2/16
		IR50MW10A	10	4	18.0	8.93	8.44	1.0 - 1.6	1.6 - 3.2	5.0 - 18.0	0.02	3.2 - 19.0	RMC Lonestar #2/16
		IR50MW11A	10	4	17.0	8.11	7.59	1.0 - 2.0	2.0 - 4.0	5.0 - 17.0	0.02	4.0 - 17.0	RMC Lonestar #2/16
		IR50MW12A	10	4	16.5	9.10	8.56	1.0 - 2.0	2.0 - 4.0	5.0 - 16.5	0.02	4.0 - 17.5	RMC Lonestar #2/16
	IR-55	IR55MW01A	10	4	14.5	5.87	5.14	0.5 - 2.0	2.0 - 4.0	4.5 - 14.5	0.02	4.0 - 14.5	RMC Lonestar #2/16
		IR55MW02A	10	4	21.5	7.78	7.24	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR55MW04A	10	4	21.5	5.47	4.87	10 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
E	IR-01	IR01MW02B ***	10	4	37.0	19.26	20.68	0 - 23.0	23.0 - 26.0	27.0 - 37.0	0.02	26.0 - 37.0	RMC Lonestar #2/16
		IR01MW03A	10	4	27.0	19.36	20.30	0 - 8.0	8.0 - 10.5	12.0 - 27.0	0.02	10.5 - 27.0	RMC Lonestar #2/16
		IR01MW05A	10	4	26.5	19.66	21.41	0 - 4.5	4.5 - 7.5	9.5 - 26.5	0.02	7.5 - 26.5	RMC Lonestar #2/16
		IR01MW07A	12	4	22.0	16.71	19.00	0 - 3.0	3.0 - 4.0	5.0 - 22.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR01MW09B	10	4	42.0	10.63	10.01	0 - 28.0	28.0 - 30.0	32.0 - 42.0	0.02	30.0 - 42.5	RMC Lonestar #2/16
		IR01MW16A	10	4	26.5	20.68	22.83	0 - 5.2	5.2 - 9.2	11.5 - 26.5	0.02	9.2 - 26.5	RMC Lonestar #2/16
		IR01MW17B	10	4	47.0	22.03	23.90	0 - 34.5	34.5 - 36.5	37.0 - 47.0	0.02	36.5 - 48.5	RMC Lonestar #2/16
		IR01MW18A	10	4	28.0	18.00	19.96	0 - 5.0	5.0 - 8.0	10.0 - 28.0	0.02	8.0 - 28.0	RMC Lonestar #2/16
		IR01MW26B	10	4	51.0	16.68	17.73	0 - 37.0	37.0 - 39.8	41.0 - 51.0	0.02	39.8 - 51.0	RMC Lonestar #2/16
		IR01MW31A	10	4	24.0	11.60	13.77	0 - 2.0	2.0 - 4.0	6.0 - 24.0	0.02	4.0 - 24.0	RMC Lonestar #2/16
		IR01MW38A	10	4	20.0	11.51	12.53	0 - 3.5	3.5 - 5.5	7.0 - 20.0	0.02	5.5 - 20.0	RMC Lonestar #2/16
		IR01MW42A	12	4	25.0	11.27	12.93	0 - 12.0	12.0 - 14.5	16.5 - 25.0	0.02	14.5 - 25.0	RMC Lonestar #3
		IR01MW43A	12	4	22.5	10.17	12.22	0 - 3.0	3.0 - 4.0	5.0 - 22.5	0.02	4.0 - 23.0	RMC Lonestar #2/16
		IR01MW44A	12	4	8.0	6.59	9.12	0 - 2.0	2.0 - 3.0	4.0 - 8.0	0.02	3.0 - 8.0	RMC Lonestar #2/16
		IR01MW47B	10	4	45.0	10.28	12.28	0 - 29.0	29.0 - 32.0	35.0 - 45.0	0.02	32.0 - 45.0	RMC Lonestar #2/16
		IR01MW48A	12	4	18.0	9.03	10.94	0 - 3.0	3.0 - 4.5	5.0 - 18.0	0.02	4.5 - 18.0	RMC Lonestar #2/16
		IR01MW53B	10	4	44.0	8.80	9.98	0 - 30.0	30.0 - 33.0	34.0 - 44.0	0.02	33.0 - 44.0	RMC Lonestar #2/16
		IR01MW58A	12	4	16.5	6.83	9.12	0 - 2.0	2.0 - 3.0	4.0 - 16.5	0.02	3.0 - 16.5	RMC Lonestar #2/16
		IR01MW62A	12	4	13.0	6.64	8.09	0 - 1.5	1.5 - 2.5	3.0 - 13.0	0.02	2.5 - 13.0	RMC Lonestar #2/16
		IR01MW63A	12	4	18.0	6.48	8.00	0 - 2.0	2.0 - 3.0	4.0 - 18.0	0.02	3.0 - 18.0	RMC Lonestar #2/16
		IR01MW63B											
		IR01MW1-2	8	2	20.5	12.32	13.21	0 - 1.5	1.5 - 3.0	5.5 - 20.5	0.01	3.5 - 20.5	12 x 20 sand
		IR01MW1-3	8	2	17.0	12.65	13.78	0 - 2.0	2.0 - 3.0	4.0 - 17.0	0.01	3.0 - 9.0	12 x 20 sand
		IR01MW1-5 ****	8	2	20.0	16.30	15.62	0 - 2.0	2.0 - 3.0	5.0 - 20.0	0.01	4.0 - 20.0	12x20 Monterey
		IR01MW1-6	8	2	11.5	8.89	9.55	0 - 2.0	2.0 - 3.0	4.0 - 11.5	0.01	3.0 - 8.0	12 x 20 sand
		IR01MW1-7	8	2	13.5	5.79	5.81	0 - 1.0	1.0 - 2.0	3.0 - 13.0	0.01	2.0 - 9.5	12 x 20 sand
		IR01MW1-8	8	2	12.0	4.12	6.64	0 - 1.0	1.0 - 1.75	2.0 - 12.0	0.01	1.75 - 6.0	12 x 20 sand
		IR01MW1-9 ****	8	2	13.0	7.34	8.00	0 - 1.0	1.0 - 2.0	3.0 - 13.0	0.01	2.0 - 14.0	12x20 Monterey
	IR-02	IR02MW87A	12	4	14.5	8.81	8.46	1.0 - 2.75	2.75 - 3.75	4.5 - 14.5	0.02	3.75 - 15.0	RMC Lonestar #2/16
		IR02MW89A	12	4	21.0	8.64	10.08	0 - 2.5	2.5 - 4.4	6.0 - 21.0	0.02	4.4 - 21.5	RMC Lonestar #2/16
		IR02MW93A	12	4	19.0	7.75	7.28	1.0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.02	3.0 - 19.0	RMC Lonestar #2/16
		IR02MW97A	12	4	22.0	6.64	8.95	0 - 2.8	2.8 - 4.0	5.0 - 22.0	0.02	4.0 - 22.0	RMC Lonestar #2/16
		IR02MW101A1	12	4	17.0	9.25	11.19	0 - 3.5	3.5 - 5.5	7.0 - 17.0	0.02	5.5 - 17.0	RMC Lonestar #3
		IR02MW101A2	12	4	34.0	9.24	11.22	0 - 22.5	22.5 - 25.5	27.0 - 34.0	0.02	25.5 - 34.0	RMC Lonestar #3

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Plezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Rentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
E	IR-02	IRO2MW114A1	12	4	10.0	11.47	13.69	0 - 2.0	2.0 - 3.5	5.0 - 10.0	0.02	3.5 - 10.0	RMC Lonestar #2/16
		IRO2MW114A2	12	4	25.0	11.55	12.43	0 - 9.0	9.0 - 12.0	13.0 - 25.0	0.02	12.0 - 25.0	RMC Lonestar #2/16
		IRO2MW114A3	12	4	49.0	11.49	13.29	0 - 37.5	37.5 - 40.5	42.0 - 49.0	0.02	40.5 - 49.0	RMC Lonestar #3
		IRO2MW126A	12	4	14.0	10.35	11.49	0 - 3.0	3.0 - 4.0	5.0 - 14.0	0.02	4.0 - 14.0	RMC Lonestar #3
		IRO2MW127B	10	4	64.0	12.51	14.63	0 - 49.0	49.0 - 52.0	54.0 - 64.0	0.02	52.0 - 64.0	RMC Lonestar #2/16
		IRO2MW141A	10	4	16.0	13.54	15.55	0 - 3.0	3.0 - 4.5	6.0 - 16.0	0.02	4.5 - 16.0	RMC Lonestar #2/16
		IRO2MW146A	10	4	18.0	7.06	9.13	0 - 3.3	3.3 - 4.5	6.0 - 18.0	0.02	4.5 - 18.5	RMC Lonestar #2/16
		IRO2MW147A	12	4	9.0	7.21	8.36	0 - 2.0	2.0 - 3.0	4.0 - 9.0	0.02	3.0 - 9.0	RMC Lonestar #2/16
		IRO2MW149A	12	4	19.5	6.17	8.72	0 - 2.0	2.0 - 3.0	4.5 - 19.5	0.02	3.0 - 19.5	RMC Lonestar #2/16
		IRO2MW173A	10	4	19.0	7.82	9.51	0 - 2.0	2.0 - 4.0	6.0 - 19.0	0.02	4.0 - 20.0	RMC Lonestar #2/16
		IRO2MW175A	12	4	31.0	8.03	7.69	0 - 6.0	6.0 - 9.0	9.0 - 31.0	0.02	9.0 - 31.0	RMC Lonestar #3
		IRO2MW179A	12	4	18.0	8.32	9.82	0 - 2.5	2.5 - 3.5	4.5 - 18.0	0.02	3.5 - 18.0	RMC Lonestar #3
		IRO2MW183A	12	4	34.0	8.73	10.40	0 - 2.0	2.0 - 3.0	4.0 - 34.0	0.02	3.0 - 34.0	RMC Lonestar #3
		IRO2MW196A	12	4	11.3	8.18	8.01	1.0 - 2.0	2.0 - 3.0	4.3 - 11.3	0.02	3.0 - 11.3	RMC Lonestar #2/16
		IRO2MW206A1	12	4	7.5	6.00	7.42	0 - 1.0	1.0 - 2.0	2.5 - 7.5	0.02	2.0 - 7.5	RMC Lonestar #2/16
		IRO2MW206A2	12	4	20.0	5.82	7.41	0.5 - 6.5	6.5 - 9.5	10.0 - 20.0	0.02	9.5 - 20.0	RMC Lonestar #3
		IRO2MW209A	12	4	19.0	5.28	6.34	1.0 - 6.0	6.0 - 7.0	9.0 - 19.0	0.02	7.0 - 19.5	RMC Lonestar #3
		IRO2MW210B	10	4	30.0	7.34	9.16	0 - 18.0	18.0 - 21.0	22.0 - 30.0	0.02	21.0 - 30.0	RMC Lonestar #3
		IRO2MW296A											
		IRO2MW298A	10	4	21.0	9.84	11.95	0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.5	RMC Lonestar #2/16
		IRO2MW299A	10	4	21.0	8.58	10.54	0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.5	RMC Lonestar #2/16
		IRO2MW300A	10	4	22.8	7.15	9.00	0 - 3.0	3.0 - 4.7	7.8 - 22.8	0.02	4.7 - 23.3	RMC Lonestar #2/16
		IRO2MWB-1	8	2	19.0	7.49	8.64	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.01	3.0 - 19.0	12 x 20 Monterey
		IRO2MWB-2 ****	8	2	19.0	11.19	11.88	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.01	3.0 - 12.0	12x20 Monterey
		IRO2MWB-3 ****	8	2	19.0	12.15	12.94	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.01	3.0 - 14.0	12x20 Monterey
		IRO2MWB-5 ****	8	2	17.0	4.74	4.70	0 - 1.0	1.0 - 2.0	3.0 - 17.0	0.01	2.0 - 17.0	12x20 Monterey
		IRO2WC5-W			8.05	7.49							
		IRO2P93AA	8	2	20.0	7.81	6.93	2.0 - 3.0	3.0 - 4.0	5.0 - 20.0	0.02	4.0 - 20.0	RMC Lonestar #3
		IRO2P93AB	8	2	19.0	7.63	7.11	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.02	3.0 - 19.0	RMC Lonestar #2/16
		IRO2PI26AA	8	2	15.0	9.81	10.58	0 - 2.5	2.5 - 3.5	5.0 - 15.0	0.02	5.0 - 15.0	RMC Lonestar #2/16
		IRO2PI26AB	10	2	15.0	10.05	11.00	0 - 2.5	2.5 - 3.5	3.5 - 15.0	0.02	3.5 - 15.0	RMC Lonestar #2/16
IR-03		IRO3MW218A1	12	4	10.0	7.66	8.67	0 - 2.0	2.0 - 3.0	4.0 - 10.0	0.02	3.0 - 10.0	RMC Lonestar #2/16
		IRO3MW218A2	12	4	17.5	7.95	9.21	0 - 9.5	9.5 - 11.5	12.5 - 17.5	0.02	11.5 - 17.5	RMC Lonestar #3
		IRO3MW218A3	12	4	30.0	7.86	8.85	0 - 16.0	16.0 - 18.5	20.0 - 30.0	0.02	18.5 - 30.0	RMC Lonestar #3
		IRO3MW224A	8	4	12.5	7.91	9.56	0 - 2.5	2.5 - 3.5	4.5 - 12.5	0.02	3.5 - 12.5	RMC Lonestar #2/16
		IRO3MW225A	12	4	19.0	7.83	9.08	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.02	3.0 - 19.0	RMC Lonestar #2/16
		IRO3MW226A	8	4	19.0	7.61	9.30	0 - 2.0	2.0 - 4.0	4.0 - 19.0	0.02	4.0 - 19.5	RMC Lonestar #2/16
		IRO3MW227B											
		IRO3MW228B	10	4	68.0	8.01	8.74	0 - 53.5	53.5 - 56.5	58.0 - 68.0	0.02	56.5 - 68.0	RMC Lonestar #2/16
		IRO3MW342A	10	4	14.5	6.56	8.46	0 - 2.0	2.0 - 3.5	5.0 - 14.5	0.02	3.5 - 15.0	RMC Lonestar #2/16
		IRO3MW0-1	8	2	18.5	6.91	7.64	0 - 1.0	1.0 - 2.0	2.5 - 17.5	0.01	2.0 - 17.0	12x20 sand
		IRO3MW0-2	8	2	21.0	8.08	9.14	0 - 2.0	2.0 - 3.0	3.5 - 20.0	0.01	3.0 - 15.0	12x20 sand
		IRO3MW0-3	8.0	2	20.0	8.18	8.58	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.01	3.0 - 15.5	12x20 sand
IR-04		IRO4MW09A	12	4	20.0	9.92	9.27	0.5 - 2.9	2.9 - 4.2	5.0 - 20.0	0.02	4.2 - 20.0	RMC Lonestar #2/16
		IRO4MW13A	12	4	20.0	10.46	12.54	0 - 2.0	2.0 - 3.0	5.0 - 20.0	0.02	3.0 - 20.5	RMC Lonestar #2/16
		IRO4MW31A	12	4	26.0	10.02	12.53	0 - 7.0	7.0 - 9.0	11.0 - 26.0	0.02	9.0 - 26.0	RMC Lonestar #3

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SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Kentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
E	IR-04	IR04MW35A	12	4	27.0	9.38	11.11	0 - 4.0	4.0 - 5.0	7.0 - 27.0	0.02	5.0 - 27.0	RMC Lonestar #2/16
		IR04MW36A	12	4	26.0	10.28	9.78	1.0 - 3.3	3.3 - 4.5	6.0 - 26.0	0.02	4.5 - 26.0	RMC Lonestar #2/16
		IR04MW37A	12	4	22.5	10.22	9.49	1.0 - 4.0	4.0 - 5.0	7.5 - 22.5	0.02	5.0 - 22.5	RMC Lonestar #2/16
		IR04MW38A	12	4	21.0	10.41	9.76	0.6 - 3.0	3.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.0	RMC Lonestar #2/16
		IR04MW39A	12	4	25.0	8.82	7.86	1.0 - 2.8	2.8 - 3.8	5.0 - 25.0	0.02	3.8 - 25.0	RMC Lonestar #2/16
		IR04MW40A	12	4	27.0	7.89	7.10	1.0 - 2.0	2.0 - 3.0	5.0 - 27.0	0.02	3.0 - 27.0	RMC Lonestar #2/16
		IR04MW74											
		IR04P31AA	8	2	19.0	10.99	11.89	0 - 8.5	7.0 - 8.5	9.0 - 19.0	0.02	7.0 - 19.0	RMC Lonestar #2/16
		IR04P31AB	8	2	30.0	10.96	12.14	0 - 7.0	7.0 - 8.0	10.0 - 30.0	0.02	8.0 - 30.0	RMC Lonestar #2/16
		IR04P38A	12	4	21.0	10.4	9.81	0.6 - 3.0	3.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.0	RMC Lonestar #2/16
IR-05		IR05MW73A	12	4	10.5	6.97	6.59	0.5 - 2.5	2.5 - 4.0	5.5 - 10.5	0.02	4.0 - 10.5	RMC Lonestar #2/16
		IR05MW74A	12	4	23.0	7.62	7.40	0.75 - 2.5	2.5 - 4.3	6.0 - 23.0	0.02	4.3 - 23.0	RMC Lonestar #2/16
		IR05MW76A	12	4	14.0	5.89	4.97	0.75 - 2.5	2.5 - 3.5	5.0 - 14.0	0.02	3.5 - 14.0	RMC Lonestar #3
		IR05MW77A	12	4	32.8	9.02	10.43	0 - 3.0	3.0 - 5.0	7.0 - 32.8	0.02	5.0 - 32.8	RMC Lonestar #3
		IR05MW82A	12	4	22.0	10.63	12.00	0 - 3.7	3.7 - 5.0	7.0 - 22.0	0.02	5.0 - 22.0	RMC Lonestar #2/16
		IR05MW85A	10	4	21.0	7.95	9.80	0 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 21.5	RMC Lonestar #2/16
		IR05P77AA	8	2	35.0	9.03	10.04	0 - 5.0	5.0 - 6.0	8.0 - 35.0	0.02	6.0 - 35.0	RMC Lonestar #3
		IR05P77AB	8	2	35.0	8.94	9.62	0 - 2.5	2.5 - 4.0	5.0 - 35.0	0.02	4.0 - 35.0	RMC Lonestar #2/16
IR-11		IR11MW25A	11	4	10.0	10.50	11.40	0 - 2.0	2.0 - 3.0	4.0 - 10.0	0.01	3.0 - 10.0	RMC Lonestar #2/16
		IR11MW26A	11	4	9.0	8.59	9.29	0 - 3.0	3.0 - 4.0	5.0 - 9.0	0.01	4.0 - 9.0	RMC Lonestar #2/16
		IR11MW27A	11	4	10.0	8.86	9.84	0 - 2.0	2.0 - 3.0	5.0 - 10.0	0.01	3.0 - 10.0	RMC Lonestar #2/16
IR-12		IR12MW11A	11	4	17.0	9.38	11.67	0 - 2.0	2.0 - 3.0	4.0 - 17.0	0.02	3.0 - 17.0	RMC Lonestar #2/16
		IR12MW12A	11	4	17.0	9.08	8.40	0.5 - 2.0	2.0 - 3.0	4.0 - 17.0	0.02	3.0 - 17.0	RMC Lonestar #2/16
		IR12MW13A	11	4	19.5	10.16	12.51	0 - 2.0	2.0 - 3.0	4.5 - 19.5	0.02	3.0 - 19.5	RMC Lonestar #2/16
		IR12MW14A	11	4	20.0	9.69	9.21	1.0 - 2.5	2.5 - 4.0	5.0 - 20.0	0.02	4.0 - 21.0	RMC Lonestar #2/16
		IR12MW15A	11	4	20.0	8.10	7.26	1.0 - 2.0	2.0 - 3.5	5.0 - 20.0	0.02	3.5 - 20.0	RMC Lonestar #2/16
		IR12MW16A	11	4	16.0	9.27	8.57	1.0 - 3.5	3.5 - 5.0	6.0 - 16.0	0.02	5.0 - 17.0	RMC Lonestar #2/16
		IR12MW17A	8	4	15.0	10.83	12.48	0 - 2.0	2.0 - 4.0	5.0 - 15.0	0.02	4.0 - 16.0	RMC Lonestar #2/16
		IR12MW18A	8	4	20.0	10.65	12.35	0 - 6.0	6.0 - 9.0	10.0 - 20.0	0.02	9.0 - 21.0	RMC Lonestar #2/16
		IR12MW19A	8	4	21.0	10.92	13.02	0 - 2.0	2.0 - 5.0	6.0 - 21.0	0.02	5.0 - 22.0	RMC Lonestar #2/16
		IR12MW20A	8	4	21.0	10.31	12.28	0 - 2.0	2.0 - 5.0	6.0 - 21.0	0.02	5.0 - 22.0	RMC Lonestar #2/16
		IR12MW21A	8	4	20.0	8.20	10.42	0 - 2.0	2.0 - 4.0	5.0 - 20.0	0.02	4.0 - 21.5	RMC Lonestar #2/16
		IR12P12AA	8	2	19.0	8.86	9.81	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.02	3.0 - 19.0	RMC Lonestar #2/16
		IR12P12AB	8	2	19.0	9.09	10.09	0 - 2.0	2.0 - 3.0	4.0 - 19.0	0.02	3.0 - 19.0	RMC Lonestar #2/16
IR-13		IR13MW10A	11	4	18.0	4.44	3.56	1.0 - 2.5	2.5 - 3.5	4.0 - 18.0	0.02	3.5 - 18.0	RMC Lonestar #2/16
		IR13MW11A	11	4	9.5	5.46	4.84	1.0 - 2.5	2.5 - 4.0	4.5 - 9.5	0.02	4.0 - 10.0	RMC Lonestar #2/16
		IR13MW12A	11	4	18.0	4.74	4.20	1.0 - 2.5	2.5 - 4.0	5.0 - 18.0	0.02	4.0 - 19.0	RMC Lonestar #2/16
		IR13P12AA	8	2	18.0	4.73	4.49	0.5 - 4.0	4.0 - 6.0	8.0 - 18.0	0.02	6.0 - 18.0	RMC Lonestar #2/16
		IR13P12AB	8	2	20.0	4.69	4.53	1.0 - 2.0	2.0 - 3.5	5.0 - 20.0	0.02	5.0 - 20.0	RMC Lonestar #2/16
IR-14		IR14MW07A				9.42	11.12						
		IR14MW09A	11	4	13.0	8.30	9.96	0 - 3.0	3.0 - 4.0	5.0 - 13.0	0.02	4.0 - 13.0	RMC Lonestar #3
		IR14MW10A	9	4	14.8	7.02	8.88	0 - 2.0	2.0 - 3.0	4.8 - 14.8	0.02	3.0 - 14.8	RMC Lonestar #2/16
		IR14MW12A	10	4	16.5	6.68	8.54	0 - 3.0	3.0 - 4.0	5.0 - 16.5	0.02	4.0 - 16.5	RMC Lonestar #3

TABLE A-1
SUMMARY OF GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

Parcel	Site	Well or Piezometer Number	Borehole Diameter (inches)	Casing Diameter (inches)	Total Depth of Casing (feet BGS*)	Ground Surface Elevation (feet above MSL**)	Top of Casing Elevation (feet above MSL)	Grout Cement Seal (feet BGS)	Bentonite Seal (feet BGS)	Screened Interval (feet BGS)	Slotted Screen Slot Size (inches)	Sandpack (feet BGS)	Sandpack Type
E	IR-14	IR14MW13A	8	4	20.0	7.89	9.74	0 - 2.0	2.0 - 3.8	5.0 - 20.0	0.02	3.8 - 21.0	RMC Lonestar #3
	IR15	IR15MW06A	10	4	19.0	9.14	11.08	0 - 3.0	3.0 - 5.0	6.0 - 19.0	0.02	5.0 - 19.0	RMC Lonestar #3
		IR15MW07A	10	4	18.0	9.42	11.12	0 - 2.0	2.0 - 4.0	5.0 - 18.0	0.02	4.0 - 18.0	RMC Lonestar #2/16
		IR15MW08A	8	4	20.0	9.75	11.75	0 - 2.0	2.0 - 4.0	5.0 - 20.0	0.02	4.0 - 21.0	RMC Lonestar #2/16
		IR15MW09F	8	4	28.0	9.64	11.48	0 - 11.5	11.5 - 15.0	18.0 - 28.0	0.02	15.0 - 29.0	RMC Lonestar #2/16
		IR15MW10F	10	4	28.0	9.09	10.95	0 - 12.5	12.5 - 16.0	18.0 - 28.0	0.02	16.0 - 30.0	RMC Lonestar #2/16
	IR-39	PA39MW03A	10	4	25.5	8.89	10.46	0 - 2.5	2.5 - 3.8	5.0 - 25.5	0.02	3.8 - 26.0	RMC Lonestar #2/16
	IR-50	PA50MW01A	10	4	16.2	9.68	9.14	1.0 - 2.5	2.5 - 4.5	6.0 - 16.2	0.02	4.5 - 17.0	RMC Lonestar #2/16
		PA50MW10A											
	IR-56	IR56MW39A	10	4	21.5	10.36	9.84	0.5 - 2.0	2.0 - 4.0	6.0 - 21.0	0.02	4.0 - 22.0	RMC Lonestar #2/16

Notes:

* BGS Below ground surface

** MSL Mean sea level

*** Aquifer Designation (A=A-aquifer, B=B-aquifer, F=bedrock aquifer)

**** HLA interpretation of EMCN well details

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APPENDIX B

**DETECTED RESULTS FOR ORGANIC COMPOUNDS AND METALS
IN GROUNDWATER SAMPLES**

**PARCELS B THROUGH E
HUNTERS POINT ANNEX, SAN FRANCISCO, CALIFORNIA**

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NOTES TO TABLES

The following explanations apply to the tables included in Appendix B.

Explanation of Sample Types

H2O	Groundwater samples collected from monitoring wells after purging
GH2O	Grab groundwater samples collected from soil boring
HH2O	Hydropunch groundwater samples

Explanations of Qualifiers

- J*: Analytical results are qualified as estimated due to the results of the full Contract Laboratory Program (CLP) validation.
- J0: Analytical results are qualified as estimated due to noncompliance with internal standard area count or retention time criteria.
- J1: Analytical results are qualified as estimated due to noncompliance with instrument performance criteria.
- J2: Analytical results are qualified as estimated due to noncompliance with precision criteria.
- J3: Analytical results are qualified as estimated due to noncompliance with spike recovery criteria.
- J4: Analytical results are qualified as estimated due to noncompliance with inductively coupled plasma (ICP) serial dilution relative percent difference (RPD) criteria.
- J5: Analytical results are qualified as estimated due to noncompliance with holding time criteria.
- J6: Analytical results are qualified as estimated due to noncompliance with field duplicate RPD criteria from the quality assurance project plan.
- J7: Analytical results are qualified as estimated due to noncompliance with initial and/or continuing calibration criteria.
- J8: Analytical results are qualified as estimated due to the presence of the compound above the calibration range.
- J9: Analytical results are qualified as estimated due to noncompliance with ICP interference check sample criteria.
- V: Analytical results received a full CLP validation.

- A: Based on cursory validation, analytical results for this compound are acceptable without qualification.
- R: Reporting limit changed due to sample volume limitations.
- U: Compound was analyzed but not detected.
- J: Result is detected below the reporting limit or is an estimated concentration.
- E: Concentration exceeds the calibration range of the gas chromatography/mass spectrometry (GC/MS) instrument for the specific analysis.
- D: Compound is identified in an analysis at a secondary dilution factor.
- B: Compound is also detected in the laboratory method blank.

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW22A	H2O	02/14/94	CLPSOC	2,4-DIMETHYLPHENOL	10	10	A
IR06	IR06MW22A	H2O	05/17/94	CLPSOC	2,4-DIMETHYLPHENOL	24	10	A
IR06	IR06MW22A	H2O	06/12/90	CLPVOC	ETHYL BENZENE	14	5	A
IR06	IR06MW22A	H2O	06/12/90	CLPVOC	TOLUENE	12	5	A
IR06	IR06MW22A	H2O	06/12/90	CLPVOC	XYLEMES	56	5	A
IR06	IR06MW22A	H2O	06/12/90	CLPVOC	BENZENE	55	5	A
IR06	IR06MW22A	H2O	01/03/91	CLPVOC	TOLUENE	6.4	5	VA
IR06	IR06MW22A	H2O	01/03/91	CLPVOC	XYLEMES	35	5	VA
IR06	IR06MW22A	H2O	01/03/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	5.8	5	VA
IR06	IR06MW22A	H2O	01/03/91	CLPVOC	BENZENE	42	5	VA
IR06	IR06MW22A	H2O	01/03/91	CLPVOC	VINYL CHLORIDE	12	10	VA
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	ETHYL BENZENE	12	5	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	TOLUENE	20	5	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	XYLEMES	40	5	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	8.4	5	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	BENZENE	72	5	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	VINYL CHLORIDE	24	10	A
IR06	IR06MW22A	H2O	07/15/91	CLPVOC	METHYL ETHYL KETONE	29	10	A
IR06	IR06MW22A	H2O	11/03/93	EPA8010	VINYL CHLORIDE	17	10	J3
IR06	IR06MW22A	H2O	11/03/93	EPA8010	FREON 113	30	10	J3
IR06	IR06MW22A	H2O	02/14/94	EPA8010	CIS-1,2-DICHLOROETHENE	5	1	A
IR06	IR06MW22A	H2O	02/14/94	EPA8010	VINYL CHLORIDE	46	1	A
IR06	IR06MW22A	H2O	02/14/94	EPA8010	TRICHLOROFLUOROMETHANE	120	1	A
IR06	IR06MW22A	H2O	02/14/94	EPA8010	FREON 113	73	1	A
IR06	IR06MW22A	H2O	08/25/94	EPA8010	VINYL CHLORIDE	10	5	A
IR06	IR06MW22A	H2O	08/25/94	EPA8010	FREON 113	25	5	A
IR06	IR06MW22A	H2O	11/03/93	EPA8020	BENZENE	32	10	J35
IR06	IR06MW22A	H2O	02/14/94	EPA8020	ETHYL BENZENE	6	1	J3
IR06	IR06MW22A	H2O	02/14/94	EPA8020	TOLUENE	8	1	J3
IR06	IR06MW22A	H2O	02/14/94	EPA8020	XYLEMES	11	1	J3
IR06	IR06MW22A	H2O	02/14/94	EPA8020	BENZENE	41	1	J3
IR06	IR06MW22A	H2O	05/16/94	EPA8020	BENZENE	39	10	J3
IR06	IR06MW22A	H2O	08/25/94	EPA8020	BENZENE	31	5	J3
IR06	IR06MW22A	H2O	01/07/91	EPA9070	TOTAL OIL & GREASE	6	0.2	J5
IR06	IR06MW22A	H2O	07/15/91	EPA9070	TOTAL OIL & GREASE	0.46	0.2	A
IR06	IR06MW22A	H2O	07/15/91	LUFID	TPH-DIESEL	1500	500	A
IR06	IR06MW22A	H2O	01/06/92	LUFID	TPH-EXTRACTABLE UNKNOWN HYDROCARBON	7.3	0.9	VA
IR06	IR06MW22A	H2O	11/04/93	LUFID	TPH-DIESEL	11000	5000	A
IR06	IR06MW22A	H2O	02/14/94	LUFID	TPH-DIESEL	1800	100	A
IR06	IR06MW22A	H2O	02/14/94	LUFID	TPH-MOTOR OIL	2200	100	A
IR06	IR06MW22A	H2O	05/17/94	LUFID	TPH-DIESEL	2700	200	A
IR06	IR06MW22A	H2O	05/17/94	LUFID	TPH-MOTOR OIL	1400	200	A
IR06	IR06MW22A	H2O	08/30/94	LUFID	TPH-DIESEL	3100	200	A
IR06	IR06MW22A	H2O	08/30/94	LUFID	TPH-MOTOR OIL	1500	200	A
IR06	IR06MW23A	H2O	06/13/90	CLPVOC	BENZENE	17	5	A
IR06	IR06MW23A	H2O	01/07/92	CLPVOC	BENZENE	7	5	A
IR06	IR06MW23A	H2O	01/07/92	CLPVOC	BENZENE	7	5	A
IR06	IR06MW23A	H2O	11/03/93	EPA8010	VINYL CHLORIDE	3	1	J3
IR06	IR06MW23A	H2O	02/15/94	EPA8010	VINYL CHLORIDE	6	1	J3
IR06	IR06MW23A	H2O	02/15/94	EPA8010	1,2-DICHLOROBENZENE	1	1	J3
IR06	IR06MW23A	H2O	05/17/94	EPA8010	VINYL CHLORIDE	8	1	A
IR06	IR06MW23A	H2O	05/17/94	EPA8010	1,2-DICHLOROBENZENE	1	1	J7
IR06	IR06MW23A	H2O	08/19/94	EPA8010	VINYL CHLORIDE	4	1	A
IR06	IR06MW23A	H2O	11/03/93	EPA8020	BENZENE	5	1	A
IR06	IR06MW23A	H2O	02/15/94	EPA8020	BENZENE	12	1	J3
IR06	IR06MW23A	H2O	02/15/94	EPA8020	1,2-DICHLOROBENZENE	2	1	A
IR06	IR06MW23A	H2O	05/17/94	EPA8020	BENZENE	14	2	A

TABLE B-1

DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW23A	H2O	05/17/94	EPA8020	1,2-DICHLOROBENZENE	2	2	J7
IR06	IR06MW23A	H2O	08/19/94	EPA8020	BENZENE	7	1	J3
IR06	IR06MW23A	H2O	08/19/94	EPA8020	1,2-DICHLOROBENZENE	2	1	A
IR06	IR06MW23A	H2O	01/07/91	EPA9070	TOTAL OIL & GREASE	0.26	0.2	VJ5
IR06	IR06MW23A	H2O	01/07/91	EPA9070	TOTAL OIL & GREASE	0.25	0.2	J5
IR06	IR06MW23A	H2O	07/16/91	LUFTD	TPH-DIESEL	500	500	A
IR06	IR06MW23A	H2O	07/16/91	LUFTD	TPH-DIESEL	620	500	A
IR06	IR06MW23A	H2O	11/03/93	LUFTD	TPH-DIESEL	540	500	A
IR06	IR06MW23A	H2O	02/15/94	LUFTD	TPH-DIESEL	170	100	A
IR06	IR06MW23A	H2O	05/17/94	LUFTD	TPH-DIESEL	410	100	A
IR06	IR06MW23A	H2O	05/17/94	LUFTD	TPH-MOTOR OIL	420	100	A
IR06	IR06MW23A	H2O	08/19/94	LUFTD	TPH-DIESEL	100	100	A
IR06	IR06MW23A	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	360	100	A
IR06	IR06MW27A	H2O	06/12/90	LUFTD	TPH-DIESEL	640	500	A
IR06	IR06MW27A	H2O	07/16/91	LUFTD	TPH-DIESEL	1200	500	A
IR06	IR06MW27A	H2O	01/07/92	LUFTD	TPH-EXTRACTABLE UNKNOWN HYDROCARBON	1.6	0.5	A
IR06	IR06MW27A	H2O	11/04/93	LUFTD	TPH-DIESEL	1100	500	A
IR06	IR06MW27A	H2O	02/15/94	LUFTD	TPH-DIESEL	700	100	A
IR06	IR06MW27A	H2O	02/15/94	LUFTD	TPH-MOTOR OIL	490	100	A
IR06	IR06MW27A	H2O	05/17/94	LUFTD	TPH-DIESEL	1100	200	V
IR06	IR06MW27A	H2O	05/17/94	LUFTD	TPH-MOTOR OIL	1700	200	V
IR06	IR06MW27A	H2O	09/01/94	LUFTD	TPH-DIESEL	690	100	A
IR06	IR06MW27A	H2O	09/01/94	LUFTD	TPH-MOTOR OIL	150	100	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	DIBENZOFURAN	12	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	ACENAPHTHENE	17	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	PHENANTHRENE	13	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	FLUORENE	16	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	ACENAPHTHENE	16	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPSOC	FLUORENE	14	10	A
IR06	IR06MW30A	H2O	07/15/91	CLPSOC	NAPHTHALENE	20	20	A
IR06	IR06MW30A	H2O	01/09/92	CLPSOC	NAPHTHALENE	43	10	A
IR06	IR06MW30A	H2O	01/09/92	CLPSOC	NAPHTHALENE	39	10	A
IR06	IR06MW30A	H2O	05/18/94	CLPSOC	NAPHTHALENE	17	10	A
IR06	IR06MW30A	H2O	08/23/94	CLPSOC	NAPHTHALENE	29	10	A
IR06	IR06MW30A	H2O	06/12/90	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	5.4	5	A
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	27	5	J3
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	BENZENE	6	5	J3
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	VINYL CHLORIDE	24	10	J3
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	29	5	J3
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	BENZENE	6.2	5	J3
IR06	IR06MW30A	H2O	01/04/91	CLPVOC	VINYL CHLORIDE	28	10	J3
IR06	IR06MW30A	H2O	07/15/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	57	5	A
IR06	IR06MW30A	H2O	07/15/91	CLPVOC	BENZENE	6	5	A
IR06	IR06MW30A	H2O	07/15/91	CLPVOC	VINYL CHLORIDE	30	10	A
IR06	IR06MW30A	H2O	07/15/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	39	5	A
IR06	IR06MW30A	H2O	07/15/91	CLPVOC	VINYL CHLORIDE	18	10	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	140	5	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	BENZENE	16	5	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	VINYL CHLORIDE	38	10	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	TRICHLOROETHENE	5	5	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	120	5	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	BENZENE	15	5	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	VINYL CHLORIDE	31	10	A
IR06	IR06MW30A	H2O	01/09/92	CLPVOC	TRICHLOROETHENE	5	5	A
IR06	IR06MW30A	H2O	11/03/93	EPA8010	CIS-1,2-DICHLOROETHENE	240	10	J3
IR06	IR06MW30A	H2O	11/03/93	EPA8010	CHLOROFORM	24	10	J3
IR06	IR06MW30A	H2O	11/03/93	EPA8010	VINYL CHLORIDE	32	10	J3

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW30A	H2O	11/03/93	EPA8010	FREON 113	20	10	J3
IR06	IR06MW30A	H2O	11/03/93	EPA8010	TRICHLOROETHENE	10	10	J3
IR06	IR06MW30A	H2O	02/15/94	EPA8010	TETRACHLOROETHENE	5	1	J6
IR06	IR06MW30A	H2O	02/15/94	EPA8010	CIS-1,2-DICHLOROETHENE	380	1	A
IR06	IR06MW30A	H2O	02/15/94	EPA8010	CHLOROFORM	8	1	J6
IR06	IR06MW30A	H2O	02/15/94	EPA8010	VINYL CHLORIDE	73	1	J6
IR06	IR06MW30A	H2O	02/15/94	EPA8010	TRICHLOROFLUOROMETHANE	42	1	J6
IR06	IR06MW30A	H2O	02/15/94	EPA8010	FREON 113	60	1	J6
IR06	IR06MW30A	H2O	02/15/94	EPA8010	TRICHLOROETHENE	23	1	J6
IR06	IR06MW30A	H2O	05/18/94	EPA8010	CIS-1,2-DICHLOROETHENE	230	10	A
IR06	IR06MW30A	H2O	05/18/94	EPA8010	VINYL CHLORIDE	51	10	A
IR06	IR06MW30A	H2O	05/18/94	EPA8010	FREON 113	50	10	A
IR06	IR06MW30A	H2O	05/18/94	EPA8010	TRICHLOROETHENE	14	10	A
IR06	IR06MW30A	H2O	08/23/94	EPA8010	CIS-1,2-DICHLOROETHENE	180	10	A
IR06	IR06MW30A	H2O	08/23/94	EPA8010	CHLOROETHANE	81	10	A
IR06	IR06MW30A	H2O	08/23/94	EPA8010	VINYL CHLORIDE	40	10	A
IR06	IR06MW30A	H2O	08/23/94	EPA8010	FREON 113	33	10	A
IR06	IR06MW30A	H2O	08/23/94	EPA8010	TRICHLOROETHENE	10	10	A
IR06	IR06MW30A	H2O	11/03/93	EPA8020	BENZENE	17	10	A
IR06	IR06MW30A	H2O	02/15/94	EPA8020	BENZENE	32	1	A
IR06	IR06MW30A	H2O	05/18/94	EPA8020	BENZENE	24	10	J3
IR06	IR06MW30A	H2O	08/23/94	EPA8020	BENZENE	19	10	A
IR06	IR06MW30A	H2O	11/03/93	EPA8270	NAPHTHALENE	24	10	A
IR06	IR06MW30A	H2O	01/04/91	EPA9070	TOTAL OIL & GREASE	0.74	0.2	A
IR06	IR06MW30A	H2O	07/15/91	LUFTD	TPH-DIESEL	530	500	A
IR06	IR06MW30A	H2O	11/03/93	LUFTD	TPH-DIESEL	860	500	A
IR06	IR06MW30A	H2O	02/15/94	LUFTD	TPH-DIESEL	460	100	A
IR06	IR06MW30A	H2O	02/15/94	LUFTD	TPH-MOTOR OIL	200	100	A
IR06	IR06MW30A	H2O	05/18/94	LUFTD	TPH-DIESEL	530	100	A
IR06	IR06MW30A	H2O	05/18/94	LUFTD	TPH-MOTOR OIL	160	100	A
IR06	IR06MW30A	H2O	08/23/94	LUFTD	TPH-DIESEL	570	100	A
IR06	IR06MW30A	H2O	08/23/94	LUFTD	TPH-MOTOR OIL	180	100	A
IR06	IR06MW32A	H2O	06/12/90	CLPSOC	FLUORENE	11	10	A
IR06	IR06MW32A	H2O	02/15/94	CLPSOC	PHENANTHRENE	10	10	A
IR06	IR06MW32A	H2O	08/24/94	CLPSOC	PHENANTHRENE	10	10	VJ0
IR06	IR06MW32A	H2O	01/07/91	CLPVOC	BENZENE	5.7	5	A
IR06	IR06MW32A	H2O	01/10/92	CLPVOC	BENZENE	11	5	VA
IR06	IR06MW32A	H2O	11/04/93	EPA8020	BENZENE	7	5	J3
IR06	IR06MW32A	H2O	02/15/94	EPA8020	BENZENE	5	1	J3
IR06	IR06MW32A	H2O	05/18/94	EPA8020	BENZENE	7	2	J3
IR06	IR06MW32A	H2O	05/18/94	EPA8020	1,2-DICHLOROBENZENE	8	2	J3
IR06	IR06MW32A	H2O	08/24/94	EPA8020	BENZENE	7	2	VJ3
IR06	IR06MW32A	H2O	01/07/91	EPA9070	TOTAL OIL & GREASE	3.4	0.2	J5
IR06	IR06MW32A	H2O	07/17/91	EPA9070	TOTAL OIL & GREASE	0.39	0.2	A
IR06	IR06MW32A	H2O	06/12/90	LUFTD	TPH-DIESEL	650	500	A
IR06	IR06MW32A	H2O	01/07/91	LUFTD	TPH-DIESEL	4200	500	A
IR06	IR06MW32A	H2O	07/17/91	LUFTD	TPH-DIESEL	4900	500	A
IR06	IR06MW32A	H2O	11/04/93	LUFTD	TPH-DIESEL	2900	1000	A
IR06	IR06MW32A	H2O	02/15/94	LUFTD	TPH-DIESEL	5400	1000	A
IR06	IR06MW32A	H2O	02/15/94	LUFTD	TPH-MOTOR OIL	1600	1000	A
IR06	IR06MW32A	H2O	08/24/94	LUFTD	TPH-DIESEL	5800	500	V
IR06	IR06MW32A	H2O	08/24/94	LUFTD	TPH-MOTOR OIL	1300	500	V
IR06	IR06MW34A	H2O	06/13/90	CLPSOC	DIBENZOFURAN	12	10	A
IR06	IR06MW34A	H2O	06/13/90	CLPSOC	ACENAPHTHENE	56	10	A
IR06	IR06MW34A	H2O	06/13/90	CLPSOC	PHENANTHRENE	10	10	A
IR06	IR06MW34A	H2O	01/04/91	CLPSOC	DIBENZOFURAN	11	10	A
IR06	IR06MW34A	H2O	01/04/91	CLPSOC	ACENAPHTHENE	48	10	A

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW34A	H2O	01/04/91	CLPSOC	PHENANTHRENE	11	10	A
IR06	IR06MW34A	H2O	07/15/91	CLPSOC	ACENAPHTHENE	37	10	
IR06	IR06MW34A	H2O	01/09/92	CLPSOC	ACENAPHTHENE	40	10	A
IR06	IR06MW34A	H2O	03/31/93	CLPSOC	ACENAPHTHENE	48	25	A
IR06	IR06MW34A	H2O	02/17/94	CLPSOC	ACENAPHTHENE	72	25	A
IR06	IR06MW34A	H2O	05/18/94	CLPSOC	ACENAPHTHENE	40	25	V
IR06	IR06MW34A	H2O	05/18/94	CLPSOC	NAPHTHALENE	15	10	V
IR06	IR06MW34A	H2O	08/19/94	CLPSOC	ACENAPHTHENE	55	25	A
IR06	IR06MW34A	H2O	08/19/94	CLPSOC	NAPHTHALENE	12	10	A
IR06	IR06MW34A	H2O	02/17/94	EPA8020	1,2-DICHLOROBENZENE	6	1	A
IR06	IR06MW34A	H2O	05/18/94	EPA8020	1,2-DICHLOROBENZENE	10	1	V
IR06	IR06MW34A	H2O	11/04/93	EPA8270	ACENAPHTHENE	55	25	A
IR06	IR06MW34A	H2O	11/04/93	LUFTD	TPH-DIESEL	590	500	J3
IR06	IR06MW34A	H2O	02/17/94	LUFTD	TPH-DIESEL	380	100	A
IR06	IR06MW34A	H2O	02/17/94	LUFTD	TPH-MOTOR OIL	660	100	A
IR06	IR06MW34A	H2O	05/18/94	LUFTD	TPH-DIESEL	440	100	V
IR06	IR06MW34A	H2O	05/18/94	LUFTD	TPH-MOTOR OIL	230	100	V
IR06	IR06MW34A	H2O	08/19/94	LUFTD	TPH-DIESEL	130	100	A
IR06	IR06MW34A	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	380	100	A
IR06	IR06MW35A	H2O	06/11/90	CLPSOC	1,2-DICHLOROBENZENE	18	10	A
IR06	IR06MW35A	H2O	06/11/90	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	22	5	A
IR06	IR06MW35A	H2O	01/04/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	15	5	A
IR06	IR06MW35A	H2O	07/17/91	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	7.8	5	A
IR06	IR06MW35A	H2O	01/08/92	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	7	5	A
IR06	IR06MW35A	H2O	11/04/93	EPA8010	CIS-1,2-DICHLOROETHENE	7	1	J3
IR06	IR06MW35A	H2O	11/04/93	EPA8010	VINYL CHLORIDE	2	1	J3
IR06	IR06MW35A	H2O	02/15/94	EPA8010	CIS-1,2-DICHLOROETHENE	9	1	A
IR06	IR06MW35A	H2O	02/15/94	EPA8010	VINYL CHLORIDE	6	1	A
IR06	IR06MW35A	H2O	05/13/94	EPA8010	CIS-1,2-DICHLOROETHENE	8	1	A
IR06	IR06MW35A	H2O	05/13/94	EPA8010	VINYL CHLORIDE	2	1	A
IR06	IR06MW35A	H2O	08/19/94	EPA8010	CIS-1,2-DICHLOROETHENE	9	1	A
IR06	IR06MW35A	H2O	08/19/94	EPA8010	VINYL CHLORIDE	1	1	A
IR06	IR06MW35A	H2O	08/19/94	EPA8010	1,2-DICHLOROBENZENE	1	1	A
IR06	IR06MW35A	H2O	05/13/94	EPA8020	1,2-DICHLOROBENZENE	1	1	A
IR06	IR06MW35A	H2O	08/19/94	EPA8020	1,2-DICHLOROBENZENE	1	1	A
IR06	IR06MW35A	H2O	11/04/93	LUFTD	TPH-DIESEL	560	500	J3
IR06	IR06MW35A	H2O	02/15/94	LUFTD	TPH-DIESEL	100	100	A
IR06	IR06MW35A	H2O	02/15/94	LUFTD	TPH-MOTOR OIL	350	100	A
IR06	IR06MW35A	H2O	05/13/94	LUFTD	TPH-MOTOR OIL	510	100	A
IR06	IR06MW35A	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	600	100	A
IR06	IR06MW40A	H2O	02/16/94	EPA8010	VINYL CHLORIDE	12	1	J3
IR06	IR06MW40A	H2O	05/13/94	EPA8010	VINYL CHLORIDE	14	1	A
IR06	IR06MW40A	H2O	08/19/94	EPA8010	VINYL CHLORIDE	1	1	A
IR06	IR06MW40A	H2O	11/08/93	LUFTD	TPH-DIESEL	510	500	J3
IR06	IR06MW40A	H2O	02/16/94	LUFTD	TPH-DIESEL	200	100	A
IR06	IR06MW40A	H2O	05/13/94	LUFTD	TPH-MOTOR OIL	120	100	A
IR06	IR06MW40A	H2O	08/19/94	LUFTD	TPH-DIESEL	120	100	A
IR06	IR06MW40A	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	190	100	A
IR06	IR06MW41A	H2O	06/11/90	CLPSOC	ACENAPHTHENE	15	10	A
IR06	IR06MW41A	H2O	06/11/90	CLPSOC	ACENAPHTHENE	16	10	A
IR06	IR06MW41A	H2O	11/08/93	EPA8010	CHLOROFORM	2	1	J3
IR06	IR06MW41A	H2O	01/03/91	EPA9070	TOTAL OIL & GREASE	0.87	0.2	A
IR06	IR06MW41A	H2O	01/08/92	EPA9070	TOTAL OIL & GREASE	6.8	5	J3
IR06	IR06MW41A	H2O	01/03/91	LUFTD	TPH-DIESEL	3500	500	A
IR06	IR06MW41A	H2O	07/16/91	LUFTD	TPH-DIESEL	730	500	A
IR06	IR06MW41A	H2O	01/08/92	LUFTD	TPH-EXTRACTABLE UNKNOWN HYDROCARBON	2.5	0.5	A
IR06	IR06MW41A	H2O	01/08/92	LUFTD	TPH-EXTRACTABLE UNKNOWN HYDROCARBON	3.2	0.5	A

TABLE B-1
DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW41A	H2O	11/08/93	LUFTD	TPH-DIESEL	850	500	J3
IR06	IR06MW41A	H2O	02/16/94	LUFTD	TPH-DIESEL	520	100	A
IR06	IR06MW41A	H2O	02/16/94	LUFTD	TPH-MOTOR OIL	170	100	A
IR06	IR06MW41A	H2O	05/13/94	LUFTD	TPH-DIESEL	520	100	A
IR06	IR06MW41A	H2O	05/13/94	LUFTD	TPH-MOTOR OIL	190	100	A
IR06	IR06MW41A	H2O	08/19/94	LUFTD	TPH-DIESEL	520	100	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	DIBENZOFURAN	97	40	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	ACENAPHTHENE	150	40	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	PHENANTHRENE	62	40	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	FLUORENE	95	40	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	NAPHTHALENE	690	40	A
IR06	IR06MW42A	H2O	06/13/90	CLPSOC	2-METHYLNAPHTHALENE	72	40	A
IR06	IR06MW42A	H2O	01/08/91	CLPSOC	DIBENZOFURAN	140	40	A
IR06	IR06MW42A	H2O	01/08/91	CLPSOC	ACENAPHTHENE	170	40	A
IR06	IR06MW42A	H2O	01/08/91	CLPSOC	PHENANTHRENE	160	40	A
IR06	IR06MW42A	H2O	01/08/91	CLPSOC	FLUORENE	130	40	A
IR06	IR06MW42A	H2O	01/08/91	CLPSOC	NAPHTHALENE	810	40	A
IR06	IR06MW42A	H2O	07/16/91	CLPSOC	DIBENZOFURAN	140	20	A
IR06	IR06MW42A	H2O	07/16/91	CLPSOC	ACENAPHTHENE	160	20	A
IR06	IR06MW42A	H2O	07/16/91	CLPSOC	PHENANTHRENE	130	20	A
IR06	IR06MW42A	H2O	07/16/91	CLPSOC	FLUORENE	120	20	A
IR06	IR06MW42A	H2O	07/16/91	CLPSOC	2-METHYLNAPHTHALENE	140	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	DIBENZOFURAN	140	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	ACENAPHTHENE	220	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	PHENANTHRENE	130	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	FLUORENE	160	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	2-METHYLNAPHTHALENE	240	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	DIBENZOFURAN	140	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	ACENAPHTHENE	230	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	PHENANTHRENE	120	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	FLUORENE	160	20	A
IR06	IR06MW42A	H2O	01/10/92	CLPSOC	2-METHYLNAPHTHALENE	230	20	A
IR06	IR06MW42A	H2O	02/14/94	CLPSOC	NAPHTHALENE	280	100	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	2,4-DIMETHYLPHENOL	35	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	DIBENZOFURAN	83	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	FLUORANTHENE	10	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	ACENAPHTHENE	130	25	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	PHENANTHRENE	74	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	FLUORENE	85	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	CARBAZOLE	53	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	NAPHTHALENE	360	10	A
IR06	IR06MW42A	H2O	05/16/94	CLPSOC	2-METHYLNAPHTHALENE	38	10	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	DIBENZOFURAN	49	10	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	FLUORANTHENE	11	10	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	ACENAPHTHENE	110	25	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	FLUORENE	54	10	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	CARBAZOLE	33	10	A
IR06	IR06MW42A	H2O	08/26/94	CLPSOC	NAPHTHALENE	30	10	A
IR06	IR06MW42A	H2O	06/13/90	CLPVOC	ETHYL BENZENE	12	5	A
IR06	IR06MW42A	H2O	06/13/90	CLPVOC	XYLENES	21	5	A
IR06	IR06MW42A	H2O	01/07/91	CLPVOC	ETHYL BENZENE	8.2	5	A
IR06	IR06MW42A	H2O	01/07/91	CLPVOC	XYLENES	19	5	A
IR06	IR06MW42A	H2O	07/16/91	CLPVOC	ETHYL BENZENE	12	5	A
IR06	IR06MW42A	H2O	07/16/91	CLPVOC	XYLENES	17	5	A
IR06	IR06MW42A	H2O	01/10/92	CLPVOC	ETHYL BENZENE	9	5	A
IR06	IR06MW42A	H2O	01/10/92	CLPVOC	XYLENES	16	5	A
IR06	IR06MW42A	H2O	01/10/92	CLPVOC	ETHYL BENZENE	7	5	A

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW42A	H2O	01/10/92	CLPVOC	XYLENES	14	5	A
IR06	IR06MW42A	H2O	11/08/93	EPA8020	ETHYL BENZENE	5	1	J3
IR06	IR06MW42A	H2O	11/08/93	EPA8020	TOLUENE	2	1	J3
IR06	IR06MW42A	H2O	11/08/93	EPA8020	XYLENES	11	1	J3
IR06	IR06MW42A	H2O	11/08/93	EPA8020	BENZENE	1	1	J3
IR06	IR06MW42A	H2O	02/14/94	EPA8020	ETHYL BENZENE	2	1	A
IR06	IR06MW42A	H2O	02/14/94	EPA8020	XYLENES	4	1	A
IR06	IR06MW42A	H2O	05/16/94	EPA8020	ETHYL BENZENE	3	1	A
IR06	IR06MW42A	H2O	05/16/94	EPA8020	TOLUENE	1	1	A
IR06	IR06MW42A	H2O	05/16/94	EPA8020	XYLENES	5	1	A
IR06	IR06MW42A	H2O	08/25/94	EPA8020	XYLENES	7	5	A
IR06	IR06MW42A	H2O	11/08/93	EPA8270	DIBENZOFURAN	100	50	A
IR06	IR06MW42A	H2O	11/08/93	EPA8270	ACENAPHTHENE	170	130	A
IR06	IR06MW42A	H2O	11/08/93	EPA8270	PHENANTHRENE	110	50	A
IR06	IR06MW42A	H2O	11/08/93	EPA8270	FLUORENE	110	50	A
IR06	IR06MW42A	H2O	11/08/93	EPA8270	NAPHTHALENE	380	50	A
IR06	IR06MW42A	H2O	07/16/91	LUFTD	TPH-DIESEL	1900	500	A
IR06	IR06MW42A	H2O	11/08/93	LUFTD	TPH-DIESEL	3200	1100	A
IR06	IR06MW42A	H2O	02/14/94	LUFTD	TPH-DIESEL	2100	100	A
IR06	IR06MW42A	H2O	02/14/94	LUFTD	TPH-MOTOR OIL	450	100	A
IR06	IR06MW42A	H2O	05/16/94	LUFTD	TPH-DIESEL	3900	500	A
IR06	IR06MW42A	H2O	05/16/94	LUFTD	TPH-MOTOR OIL	540	500	A
IR06	IR06MW42A	H2O	08/26/94	LUFTD	TPH-DIESEL	1100	100	A
IR06	IR06MW42A	H2O	08/26/94	LUFTD	TPH-MOTOR OIL	450	100	A
IR06	IR06MW44A	H2O	08/25/94	LUFTD	TPH-MOTOR OIL	3100	200	A
IR06	IR06MW45A	H2O	08/25/94	LUFTD	TPH-MOTOR OIL	1400	100	V
IR06	IR06MW46A	H2O	08/25/94	LUFTD	TPH-MOTOR OIL	470	100	A
IR06	IR06MW47F	H2O	11/08/93	LUFTD	TPH-DIESEL	1000	500	A
IR06	IR06MW47F	H2O	02/16/94	LUFTD	TPH-MOTOR OIL	390	100	V
IR06	IR06MW47F	H2O	05/18/94	LUFTD	TPH-MOTOR OIL	300	100	A
IR06	IR06MW48F	H2O	11/08/93	EPA8010	CIS-1,2-DICHLOROETHENE	3	1	J3
IR06	IR06MW48F	H2O	11/08/93	EPA8010	CHLOROFORM	2	1	J3
IR06	IR06MW48F	H2O	11/08/93	EPA8010	VINYL CHLORIDE	7	1	J3
IR06	IR06MW48F	H2O	02/14/94	EPA8010	CHLOROFORM	2	1	VJ6
IR06	IR06MW48F	H2O	02/14/94	EPA8010	VINYL CHLORIDE	11	1	V
IR06	IR06MW48F	H2O	05/16/94	EPA8010	CIS-1,2-DICHLOROETHENE	2	1	J7
IR06	IR06MW48F	H2O	05/16/94	EPA8010	VINYL CHLORIDE	11	1	A
IR06	IR06MW48F	H2O	08/19/94	EPA8010	CIS-1,2-DICHLOROETHENE	3	1	A
IR06	IR06MW48F	H2O	08/19/94	EPA8010	VINYL CHLORIDE	6	1	A
IR06	IR06MW48F	H2O	11/08/93	EPA8020	BENZENE	2	1	A
IR06	IR06MW48F	H2O	02/14/94	EPA8020	BENZENE	1	1	VJ3
IR06	IR06MW48F	H2O	05/16/94	EPA8020	BENZENE	1	1	J7
IR06	IR06MW48F	H2O	08/19/94	EPA8020	BENZENE	1	1	A
IR06	IR06MW48F	H2O	11/08/93	LUFTD	TPH-DIESEL	760	500	J3
IR06	IR06MW48F	H2O	02/14/94	LUFTD	TPH-MOTOR OIL	750	100	V
IR06	IR06MW48F	H2O	05/16/94	LUFTD	TPH-DIESEL	140	100	A
IR06	IR06MW48F	H2O	05/16/94	LUFTD	TPH-MOTOR OIL	1100	100	A
IR06	IR06MW48F	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	550	100	A
IR06	IR06MW49F	H2O	11/08/93	EPA8010	TRICHLOROETHENE	4	1	J3
IR06	IR06MW49F	H2O	02/16/94	EPA8010	TRICHLOROETHENE	2	1	A
IR06	IR06MW49F	H2O	05/16/94	EPA8010	TRICHLOROETHENE	3	1	VJ6
IR06	IR06MW49F	H2O	08/19/94	EPA8010	TRICHLOROETHENE	4	1	A
IR06	IR06MW49F	H2O	02/16/94	LUFTD	TPH-DIESEL	1300	100	A
IR06	IR06MW49F	H2O	02/16/94	LUFTD	TPH-MOTOR OIL	410	100	A
IR06	IR06MW49F	H2O	05/16/94	LUFTD	TPH-DIESEL	2400	200	V
IR06	IR06MW49F	H2O	05/16/94	LUFTD	TPH-MOTOR OIL	700	200	V
IR06	IR06MW49F	H2O	08/19/94	LUFTD	TPH-DIESEL	1600	200	J6

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW50F	H2O	05/25/95	LUFTD	TPH-MOTOR OIL	630	100	
IR06	IR06MW52F	H2O	05/25/95	LUFTD	TPH-MOTOR OIL	700	100	
IR06	IR06MW53F	H2O	03/15/94	LUFTD	TPH-MOTOR OIL	1000	100	A
IR06	IR06MW53F	H2O	05/25/95	LUFTD	TPH-MOTOR OIL	270	100	
IR06	IR06MW55F	H2O	12/27/93	CLPVOC	CARBON TETRACHLORIDE	28	10	A
IR06	IR06MW55F	H2O	12/27/93	CLPVOC	CHLOROFORM	11	10	A
IR06	IR06MW55F	H2O	12/27/93	CLPVOC	TRICHLOROETHENE	14	10	A
IR06	IR06MW55F	H2O	08/17/94	LUFTD	TPH-MOTOR OIL	630	100	V
IR06	IR06MW56F	H2O	08/17/94	LUFTD	TPH-MOTOR OIL	360	100	A
IR06	IR06MW56F	H2O	05/25/95	LUFTD	TPH-MOTOR OIL	560	100	
IR06	IR06MW57F	H2O	09/13/94	LUFTD	TPH-MOTOR OIL	460	100	A
IR06	IR06MW57F	H2O	05/24/95	LUFTD	TPH-MOTOR OIL	680	100	
IR06	IR06MW58F	H2O	06/21/94	LUFTD	TPH-MOTOR OIL	120	100	A
IR06	IR06MW58F	H2O	08/17/94	LUFTD	TPH-MOTOR OIL	560	100	A
IR06	IR06MW58F	H2O	05/24/95	LUFTD	TPH-MOTOR OIL	410	100	
IR07	IR07B046	GH2O	06/15/92	LUFTD	TPH-EXTRACTABLE UNKNOWN HYDROCARBON	0.72	0.5	A
IR07	IR07MW20A1	H2O	06/01/92	CLPVOC	ACETONE	27	10	A
IR07	IR07MW23A	H2O	06/02/92	CLPVOC	CARBON DISULFIDE	14	5	A
IR07	IR07MW23A	H2O	01/12/94	LUFTD	TPH-MOTOR OIL	540	100	A
IR10	IR10B033	HH2O	04/27/95	EPA8010	1,2-DICHLOROETHANE	31	1	
IR10	IR10B033	HH2O	04/27/95	EPA8010	CIS-1,2-DICHLOROETHENE	12	1	
IR10	IR10B033	HH2O	04/27/95	EPA8010	VINYL CHLORIDE	5	1	
IR10	IR10B033	HH2O	04/27/95	EPA8010	TRICHLOROFUOROMETHANE	3	1	
IR10	IR10B035A	HH2O	04/21/95	EPA8010	TRICHLOROETHENE	750	20	
IR10	IR10B035A	HH2O	04/21/95	LUFTG	TPH-GASOLINE	280	50	
IR10	IR10B036	HH2O	04/20/95	EPA8010	TRICHLOROETHENE	45	2	
IR10	IR10B037	HH2O	04/19/95	EPA8010	TRICHLOROETHENE	390	10	
IR10	IR10B037	HH2O	04/19/95	LUFTD	TPH-MOTOR OIL	220	100	
IR10	IR10B037	HH2O	04/19/95	LUFTG	TPH-GASOLINE	160	50	
IR10	IR10B038	HH2O	04/11/95	LUFTD	TPH-DIESEL	120	100	
IR10	IR10B038	HH2O	04/11/95	LUFTD	TPH-MOTOR OIL	430	100	
IR10	IR10MW12A	H2O	08/21/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	
IR10	IR10MW13A1	H2O	08/31/94	CLPSOC	BIS(2-ETHYLHEXYL)PHTHALATE	120	10	A
IR10	IR10MW13A1	H2O	03/09/89	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	66	5	VA
IR10	IR10MW13A1	H2O	03/09/89	CLPVOC	TRICHLOROETHENE	31	5	VA
IR10	IR10MW13A1	H2O	01/13/92	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	11	5	A
IR10	IR10MW13A1	H2O	01/13/92	CLPVOC	TRICHLOROETHENE	8	5	A
IR10	IR10MW13A1	H2O	01/13/92	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	11	5	A
IR10	IR10MW13A1	H2O	01/13/92	CLPVOC	TRICHLOROETHENE	9	5	A
IR10	IR10MW13A1	H2O	08/22/90	EPA8010	1,2-DICHLOROETHENE (TOTAL)	38	0.5	A
IR10	IR10MW13A1	H2O	08/22/90	EPA8010	TRICHLOROETHENE	13	0.5	A
IR10	IR10MW13A1	H2O	08/22/90	EPA8010	1,2-DICHLOROETHENE (TOTAL)	27	0.5	A
IR10	IR10MW13A1	H2O	08/22/90	EPA8010	TRICHLOROETHENE	7.7	0.5	A
IR10	IR10MW13A1	H2O	07/11/91	EPA8010	1,2-DICHLOROETHENE (TOTAL)	2.2	0.5	A
IR10	IR10MW13A1	H2O	07/12/91	EPA8010	1,2-DICHLOROETHENE (TOTAL)	19	0.5	A
IR10	IR10MW13A1	H2O	07/12/91	EPA8010	TRICHLOROETHENE	9	0.5	A
IR10	IR10MW13A1	H2O	11/09/93	EPA8010	CIS-1,2-DICHLOROETHENE	9	1	J3
IR10	IR10MW13A1	H2O	11/09/93	EPA8010	TRANS-1,2-DICHLOROETHENE	1	1	J3
IR10	IR10MW13A1	H2O	11/09/93	EPA8010	TRICHLOROETHENE	10	1	J3
IR10	IR10MW13A1	H2O	02/17/94	EPA8010	CIS-1,2-DICHLOROETHENE	8	1	A
IR10	IR10MW13A1	H2O	02/17/94	EPA8010	TRICHLOROETHENE	8	1	A
IR10	IR10MW13A1	H2O	05/12/94	EPA8010	CIS-1,2-DICHLOROETHENE	10	1	A
IR10	IR10MW13A1	H2O	05/12/94	EPA8010	TRICHLOROETHENE	8	1	A
IR10	IR10MW13A1	H2O	08/31/94	EPA8010	CIS-1,2-DICHLOROETHENE	15	1	A
IR10	IR10MW13A1	H2O	08/31/94	EPA8010	TRANS-1,2-DICHLOROETHENE	1	1	A
IR10	IR10MW13A1	H2O	08/31/94	EPA8010	TRICHLOROETHENE	8	1	A
IR10	IR10MW13A1	H2O	08/22/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR10	IR10MW13A1	H2O	08/22/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	
IR10	IR10MW13A2	H2O	03/09/89	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	8	5	A
IR10	IR10MW13A2	H2O	08/22/90	EPA8010	1,2-DICHLOROETHENE (TOTAL)	8.3	0.5	A
IR10	IR10MW13A2	H2O	08/22/90	EPA8010	TRICHLOROETHENE	0.6	0.5	A
IR10	IR10MW13A2	H2O	07/11/91	EPA8010	1,2-DICHLOROETHENE (TOTAL)	1.3	0.5	A
IR10	IR10MW13A2	H2O	11/09/93	EPA8010	CIS-1,2-DICHLOROETHENE	3	1	J3
IR10	IR10MW13A2	H2O	11/09/93	EPA8010	VINYL CHLORIDE	1	1	J3
IR10	IR10MW13A2	H2O	05/12/94	EPA8010	CIS-1,2-DICHLOROETHENE	2	1	A
IR10	IR10MW13A2	H2O	08/31/94	EPA8010	CIS-1,2-DICHLOROETHENE	5	1	A
IR10	IR10MW13A2	H2O	08/22/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	
IR10	IR10MW14A	H2O	08/22/90	EPA8010	TRICHLOROETHENE	0.65	0.5	VA
IR10	IR10MW14A	H2O	07/12/91	EPA8010	1,2-DICHLOROETHENE (TOTAL)	4	0.5	A
IR10	IR10MW14A	H2O	07/12/91	EPA8010	TRICHLOROETHENE	3.6	0.5	A
IR10	IR10MW14A	H2O	11/09/93	EPA8010	CIS-1,2-DICHLOROETHENE	1	1	J3
IR10	IR10MW14A	H2O	11/09/93	EPA8010	TRANS-1,2-DICHLOROETHENE	2	1	J3
IR10	IR10MW14A	H2O	11/09/93	EPA8010	1,3-DICHLOROBENZENE	4	1	J3
IR10	IR10MW14A	H2O	11/09/93	EPA8010	TRICHLOROETHENE	4	1	J3
IR10	IR10MW14A	H2O	02/17/94	EPA8010	TRICHLOROETHENE	2	1	J3
IR10	IR10MW14A	H2O	08/22/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	
IR10	IR10MW14A	H2O	07/12/91	EPA8020	1,3-DICHLOROBENZENE	5.3	1	A
IR10	IR10MW15A	H2O	08/22/90	EPA8015	METHYL ISOBUTYL KETONE	1	1	
IR10	IR10MW28A	H2O	10/31/91	CLPVOC	TRICHLOROETHENE	38	5	A
IR10	IR10MW28A	H2O	01/13/92	CLPVOC	CARBON DISULFIDE	9	5	A
IR10	IR10MW28A	H2O	01/13/92	CLPVOC	TRICHLOROETHENE	28	5	A
IR10	IR10MW28A	H2O	11/09/93	EPA8010	TRICHLOROETHENE	27	1	J3
IR10	IR10MW28A	H2O	02/22/94	EPA8010	TRICHLOROETHENE	30	1	A
IR10	IR10MW28A	H2O	05/16/94	EPA8010	TRICHLOROETHENE	42	2	J7
IR10	IR10MW28A	H2O	08/22/94	EPA8010	TRICHLOROETHENE	45	2	A
IR10	IR10MW31A1	H2O	08/11/94	LUFTD	TPH-MOTOR OIL	160	100	A
IR10	IR10MW31A1	H2O	05/23/95	LUFTD	TPH-MOTOR OIL	820	100	
IR10	IR10MW31A2	H2O	05/23/95	CLPSOC	2,6-DINITROTOLUENE	72	25	
IR10	IR10MW31A2	H2O	03/01/94	LUFTD	TPH-MOTOR OIL	130	100	A
IR10	IR10MW31A2	H2O	08/11/94	LUFTD	TPH-MOTOR OIL	360	100	A
IR10	IR10MW31A2	H2O	05/23/95	LUFTD	TPH-DIESEL	240	100	
IR10	IR10MW31A2	H2O	05/23/95	LUFTD	TPH-MOTOR OIL	390	100	
IR10	IR10MW32A	H2O	03/22/94	LUFTD	TPH-MOTOR OIL	100	100	A
IR10	IR10MW32A	H2O	08/11/94	LUFTD	TPH-MOTOR OIL	180	100	V
IR10	IR10MW32A	H2O	05/23/95	LUFTD	TPH-MOTOR OIL	450	100	
IR10	IR10UC5W	H2O	03/15/89	CLPVOC	METHYL ETHYL KETONE	24	10	
IR18	IR18B012	GH2O	04/23/93	EPA9070	TOTAL OIL & GREASE	23	5	V
IR18	IR18B013	GH2O	04/22/93	EPA9070	TOTAL OIL & GREASE	66	5	A
IR18	IR18MW21A	H2O	04/28/93	CLPVOC	CARBON DISULFIDE	13	10	V
IR18	IR18MW21A	H2O	01/12/94	LUFTD	TPH-MOTOR OIL	350	100	V
IR18	IR18MW22A	H2O	01/12/94	LUFTD	TPH-MOTOR OIL	740	100	A
IR18	PA18MW08A	H2O	01/13/94	LUFTD	TPH-MOTOR OIL	610	100	A
IR18	PA18MW09A	H2O	01/11/94	LUFTD	TPH-MOTOR OIL	270	100	A
IR20	IR20B010	GH2O	05/11/93	EPA9070	TOTAL OIL & GREASE	6	5	A
IR20	IR20MW01A	H2O	01/11/94	LUFTD	TPH-MOTOR OIL	470	100	A
IR20	IR20MW06A	H2O	01/12/94	LUFTD	TPH-MOTOR OIL	490	100	A
IR20	IR20MW11A	H2O	05/21/93	EPA9070	TOTAL OIL & GREASE	5	5	A
IR20	IR20MW11A	H2O	01/11/94	LUFTD	TPH-MOTOR OIL	130	100	V
IR20	IR20MW17A	H2O	08/10/94	CLPVOC	BENZENE	10	10	A
IR20	IR20MW17A	H2O	05/05/94	LUFTD	TPH-DIESEL	150	100	A
IR20	IR20MW17A	H2O	08/10/94	LUFTG	TPH-GASOLINE	190	50	A
IR23	IR23B008	HH2O	05/04/94	LUFTD	TPH-DIESEL	920	100	A
IR23	IR23B008	HH2O	05/04/94	LUFTD	TPH-MOTOR OIL	1300	100	A
IR23	IR23B009	HH2O	05/04/94	EPA8020	METHYL ETHYL KETONE	57	5	A

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR23	IR23B009	HH2O	05/04/94	LUFTD	TPH-DIESEL	130	100	A
IR23	IR23B009	HH2O	05/04/94	LUFTD	TPH-MOTOR OIL	110	100	A
IR24	IR24B012	GH2O	03/03/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	14400	34	A
IR24	IR24B012	GH2O	03/03/94	LUFTD	TPH-DIESEL	15000	3.9	A
IR24	IR24MW04A	H2O	04/20/95	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	6.2	2	
IR24	IR24MW04A	H2O	04/20/95	LUFTD	TPH-DIESEL	2300	100	
IR24	IR24MW04A	H2O	04/20/95	LUFTG	TPH-GASOLINE	260	100	
IR24	PA24MW01A	H2O	08/18/94	LUFTD	TPH-MOTOR OIL	100	100	A
IR24	PA24MW02A	H2O	02/01/93	EPA9070	TOTAL OIL & GREASE	10	5	A
IR24	PA24MW02A	H2O	02/01/93	LUFTD	TPH-DIESEL	4300	2500	A
IR24	PA24MW02A	H2O	08/18/94	LUFTD	TPH-DIESEL	430	100	A
IR24	PA24MW02A	H2O	08/18/94	LUFTD	TPH-MOTOR OIL	200	100	A
IR24	PA24MW03A	H2O	08/18/94	CLPVOC	CARBON DISULFIDE	21	10	A
IR24	PA24MW03A	H2O	02/05/93	LUFTD	TPH-DIESEL	3500	52	A
IR24	PA24MW03A	H2O	08/18/94	LUFTD	TPH-DIESEL	26000	2000	A
IR24	PA24MW03A	H2O	02/05/93	LUFTG	TPH-PURGEABLE UNKNOWN HYDROCARBON	2800000	1000	A
IR25	IR25B012	GH2O	11/24/93	CLPSOC	1,4-DICHLOROBENZENE	34	20	A
IR25	IR25B012	GH2O	11/24/93	CLPSOC	1,2-DICHLOROBENZENE	150	20	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	1,2-DICHLOROETHANE	46	10	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	CHLOROBENZENE	28	10	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	TETRACHLOROETHENE	31	10	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	150	10	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	VINYL CHLORIDE	300	10	A
IR25	IR25B012	GH2O	11/24/93	CLPVOC	TRICHLOROETHENE	14	10	A
IR25	IR25B012	GH2O	11/24/93	LUFTD	TPH-DIESEL	1800	500	A
IR25	IR25B012	GH2O	11/24/93	LUFTG	TPH-GASOLINE	370	50	A
IR25	IR25B013	GH2O	11/24/93	CLPSOC	2,4-DIMETHYLPHENOL	15000	5000	A
IR25	IR25B013	GH2O	11/24/93	CLPSOC	4-METHYLPHENOL	7700	5000	A
IR25	IR25B013	GH2O	11/24/93	CLPSOC	1,4-DICHLOROBENZENE	7900	5000	A
IR25	IR25B013	GH2O	11/24/93	CLPSOC	1,2-DICHLOROBENZENE	34000	5000	A
IR25	IR25B013	GH2O	11/24/93	CLPVOC	1,2-DICHLOROETHANE	55000	10000	A
IR25	IR25B013	GH2O	11/24/93	CLPVOC	TETRACHLOROETHENE	59000	10000	A
IR25	IR25B013	GH2O	11/24/93	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	55000	10000	A
IR25	IR25B013	GH2O	11/24/93	CLPVOC	TRICHLOROETHENE	12000	10000	A
IR25	IR25B013	GH2O	11/24/93	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	6.9	5	A
IR25	IR25B013	GH2O	11/24/93	LUFTD	TPH-DIESEL	49000	25000	A
IR25	IR25MW11A	GH2O	11/24/93	CLPSOC	HEXACHLOROETHANE	530	250	J3
IR25	IR25MW11A	GH2O	11/24/93	CLPSOC	PHENANTHRENE	910	250	J3
IR25	IR25MW11A	GH2O	11/24/93	CLPSOC	NAPHTHALENE	360	250	J3
IR25	IR25MW11A	GH2O	11/24/93	CLPSOC	2-METHYLNAPHTHALENE	1300	250	J3
IR25	IR25MW11A	H2O	12/28/93	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	4200	1000	J3
IR25	IR25MW11A	H2O	08/18/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	16000	4000	A
IR25	IR25MW11A	GH2O	11/24/93	LUFTD	TPH-DIESEL	440000	130000	A
IR25	IR25MW11A	H2O	12/28/93	LUFTD	TPH-DIESEL	480000	100000	A
IR25	IR25MW11A	H2O	08/18/94	LUFTD	TPH-DIESEL	3400000	200000	A
IR25	IR25MW11A	H2O	12/28/93	LUFTG	TPH-GASOLINE	1500	500	A
IR25	IR25MW15A1	H2O	06/14/94	CLPPEST	AROCLOR-1260	2	1.06	J3
IR25	IR25MW15A1	H2O	06/14/94	CLPSOC	2,4-DIMETHYLPHENOL	2700	1043.84	J0
IR25	IR25MW15A1	H2O	06/14/94	CLPSOC	1,4-DICHLOROBENZENE	14000	521.92	J0
IR25	IR25MW15A1	H2O	06/14/94	CLPSOC	2-METHYLPHENOL	2100	1043.84	J0
IR25	IR25MW15A1	H2O	06/14/94	CLPSOC	1,2-DICHLOROBENZENE	62000	521.92	J0
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	2,4-DIMETHYLPHENOL	16000	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	4-METHYLPHENOL	9100	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	1,4-DICHLOROBENZENE	5900	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	PHENOL	2300	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	1,3-DICHLOROBENZENE	260	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	2-METHYLPHENOL	3800	200	A

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR25	IR25MW15A1	H2O	08/11/94	CLPSOC	1,2-DICHLOROBENZENE	19000	200	A
IR25	IR25MW15A1	H2O	08/11/94	CLPVOC	1,2-DICHLOROETHANE	140000	10000	A
IR25	IR25MW15A1	H2O	08/11/94	CLPVOC	TETRACHLOROETHENE	50000	10000	A
IR25	IR25MW15A1	H2O	08/11/94	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	57000	10000	A
IR25	IR25MW15A1	H2O	06/14/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	4.3	0.32	A
IR25	IR25MW15A1	H2O	08/11/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	8.1	4	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	1,4-DICHLOROBENZENE	7800	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	1,2-DICHLOROETHANE	30000	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	TETRACHLOROETHENE	30000	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	CIS-1,2-DICHLOROETHENE	25000	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	TRICHLOROETHENE	4200	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8010	1,2-DICHLOROBENZENE	35000	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8020	1,4-DICHLOROBENZENE	9400	2000	A
IR25	IR25MW15A1	H2O	06/13/94	EPA8020	1,2-DICHLOROBENZENE	37000	2000	A
IR25	IR25MW15A1	H2O	06/14/94	LUFTD	TPH-DIESEL	37000	2000	A
IR25	IR25MW15A1	H2O	08/11/94	LUFTD	TPH-DIESEL	110000	10000	A
IR25	IR25MW15A1	H2O	06/13/94	LUFTG	TPH-GASOLINE	90000	12000	A
IR25	IR25MW15A1	H2O	08/11/94	LUFTG	TPH-GASOLINE	180000	12000	A
IR25	IR25MW15A2	H2O	06/10/94	CLPPEST	AROCLOR-1260	5.4	1	VJ3
IR25	IR25MW15A2	H2O	08/11/94	CLPPEST	AROCLOR-1260	11	1	J3
IR25	IR25MW15A2	H2O	05/26/95	CLPPEST	AROCLOR-1260	3.6	1	
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	2,4-DIMETHYLPHENOL	200	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	4-METHYLPHENOL	120	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	1,4-DICHLOROBENZENE	340	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	PHENOL	25	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	1,3-DICHLOROBENZENE	17	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	NAPHTHALENE	13	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	2-METHYLPHENOL	47	10	V
IR25	IR25MW15A2	H2O	06/10/94	CLPSOC	1,2-DICHLOROBENZENE	1000	10	V
IR25	IR25MW15A2	H2O	08/11/94	CLPSOC	2,4-DIMETHYLPHENOL	270	50	A
IR25	IR25MW15A2	H2O	08/11/94	CLPSOC	4-METHYLPHENOL	140	50	A
IR25	IR25MW15A2	H2O	08/11/94	CLPSOC	1,4-DICHLOROBENZENE	680	50	A
IR25	IR25MW15A2	H2O	08/11/94	CLPSOC	2-METHYLPHENOL	63	50	A
IR25	IR25MW15A2	H2O	08/11/94	CLPSOC	1,2-DICHLOROBENZENE	2700	50	A
IR25	IR25MW15A2	H2O	05/26/95	CLPSOC	2,4-DIMETHYLPHENOL	16	10	
IR25	IR25MW15A2	H2O	05/26/95	CLPSOC	1,4-DICHLOROBENZENE	200	10	
IR25	IR25MW15A2	H2O	05/26/95	CLPSOC	1,2-DICHLOROBENZENE	810	10	
IR25	IR25MW15A2	H2O	08/11/94	CLPVOC	1,2-DICHLOROETHANE	4500	500	A
IR25	IR25MW15A2	H2O	08/11/94	CLPVOC	TETRACHLOROETHENE	5200	500	A
IR25	IR25MW15A2	H2O	05/26/95	CLPVOC	1,2-DICHLOROETHANE	1700	50	
IR25	IR25MW15A2	H2O	05/26/95	CLPVOC	TETRACHLOROETHENE	600	50	
IR25	IR25MW15A2	H2O	05/26/95	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	760	50	
IR25	IR25MW15A2	H2O	05/26/95	CLPVOC	TRICHLOROETHENE	170	50	
IR25	IR25MW15A2	H2O	06/10/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	1.3	1	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8010	1,4-DICHLOROBENZENE	940	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8010	1,2-DICHLOROETHANE	2400	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8010	TETRACHLOROETHENE	4000	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8010	CIS-1,2-DICHLOROETHENE	190	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8010	1,2-DICHLOROBENZENE	4000	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8020	1,4-DICHLOROBENZENE	1100	100	V
IR25	IR25MW15A2	H2O	06/10/94	EPA8020	1,2-DICHLOROBENZENE	4000	100	V
IR25	IR25MW15A2	H2O	06/10/94	LUFTD	TPH-DIESEL	4800	500	V
IR25	IR25MW15A2	H2O	06/10/94	LUFTD	TPH-MOTOR OIL	930	500	V
IR25	IR25MW15A2	H2O	08/11/94	LUFTD	TPH-DIESEL	4500	500	A
IR25	IR25MW15A2	H2O	05/26/95	LUFTD	TPH-DIESEL	1100	100	
IR25	IR25MW15A2	H2O	05/26/95	LUFTD	TPH-MOTOR OIL	350	100	
IR25	IR25MW15A2	H2O	06/10/94	LUFTG	TPH-GASOLINE	8600	1200	VZ

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR25	IR25MW15A2	H2O	08/11/94	LUFTG	TPH-GASOLINE	11000	1200	A
IR25	IR25MW15A2	H2O	05/26/95	LUFTG	TPH-GASOLINE	3100	250	
IR25	IR25MW16A	H2O	06/02/94	CLPPEST	ENDOSULFAN SULFATE	0.11	0.1	J3
IR25	IR25MW16A	H2O	08/18/94	CLPVOC	1,2-DICHLOROETHENE (TOTAL)	10	10	A
IR25	IR25MW16A	H2O	08/18/94	CLPVOC	TRICHLOROETHENE	86	10	A
IR25	IR25MW16A	H2O	06/02/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	0.51	0.37	A
IR25	IR25MW16A	H2O	06/01/94	EPA8010	TRICHLOROETHENE	6	1	A
IR25	IR25MW16A	H2O	06/02/94	LUFTD	TPH-DIESEL	130	100	A
IR25	IR25MW16A	H2O	06/02/94	LUFTD	TPH-MOTOR OIL	260	100	A
IR25	IR25MW16A	H2O	08/19/94	LUFTD	TPH-MOTOR OIL	220	100	A
IR25	IR25MW16A	H2O	08/18/94	LUFTG	TPH-GASOLINE	180	50	A
IR25	IR25MW17A	H2O	06/30/94	EPA8010	1,2-DICHLOROETHANE	2	1	A
IR25	IR25MW17A	H2O	06/30/94	EPA8010	CHLOROETHANE	1	1	A
IR25	IR25MW17A	H2O	06/30/94	EPA8010	TRICHLOROFUOROMETHANE	1	1	A
IR25	IR25MW17A	H2O	07/01/94	LUFTD	TPH-DIESEL	100	100	V
IR26	IR26B011	GH2O	12/21/93	LUFTD	TPH-DIESEL	1300	1000	A
IR26	IR26B012	GH2O	12/21/93	CLPVOC	CARBON DISULFIDE	24	10	A
IR26	IR26B012	GH2O	12/21/93	LUFTD	TPH-DIESEL	850	500	A
IR26	IR26B017	GH2O	05/06/94	EPA8010	VINYL CHLORIDE	1	1	A
IR26	IR26B017	GH2O	05/06/94	LUFTD	TPH-MOTOR OIL	77000	10000	A
IR26	IR26B021	HH2O	07/29/94	LUFTD	TPH-DIESEL	140	100	A
IR26	IR26B022	HH2O	08/10/94	LUFTD	TPH-DIESEL	550	100	A
IR26	IR26B022	HH2O	08/10/94	LUFTD	TPH-MOTOR OIL	1700	100	A
IR26	IR26B023	HH2O	08/11/94	LUFTD	TPH-DIESEL	110	100	A
IR26	IR26B024	HH2O	08/26/94	EPA8010	CIS-1,2-DICHLOROETHENE	2	1	A
IR26	IR26B024	HH2O	08/26/94	EPA8010	VINYL CHLORIDE	3	1	A
IR26	IR26B024	HH2O	08/26/94	EPA8010	TRICHLOROETHENE	22	1	A
IR26	IR26B024	HH2O	08/26/94	LUFTD	TPH-MOTOR OIL	190	100	A
IR26	IR26B025	HH2O	08/12/94	LUFTD	TPH-DIESEL	150	100	A
IR26	IR26B026	HH2O	08/24/94	EPA8010	VINYL CHLORIDE	7	1	A
IR26	IR26B026	HH2O	08/24/94	LUFTD	TPH-MOTOR OIL	150	100	A
IR26	IR26B027	GH2O	07/28/94	LUFTD	TPH-MOTOR OIL	10000	1000	A
IR26	IR26B028	GH2O	09/12/94	LUFTD	TPH-MOTOR OIL	260	100	A
IR26	IR26B029	GH2O	09/13/94	LUFTD	TPH-MOTOR OIL	1400	200	A
IR26	IR26B030	GH2O	09/13/94	EPA8010	CHLOROMETHANE	2	1	A
IR26	IR26B030	GH2O	09/13/94	EPA8010	CHLOROETHANE	11	1	A
IR26	IR26B030	GH2O	09/13/94	EPA8010	DICHLORODIFLUOROMETHANE	7	1	A
IR26	IR26B030	GH2O	09/13/94	EPA8010	FREON 113	1	1	A
IR26	IR26B030	GH2O	09/13/94	LUFTD	TPH-MOTOR OIL	13000	1000	A
IR26	IR26B031	HH2O	09/15/94	LUFTD	TPH-DIESEL	670	100	A
IR26	IR26B031	HH2O	09/15/94	LUFTD	TPH-MOTOR OIL	920	100	A
IR26	IR26B031	HH2O	09/14/94	LUFTG	TPH-GASOLINE	52	50	A
IR26	IR26B032	GH2O	09/16/94	LUFTD	TPH-MOTOR OIL	320	100	A
IR26	IR26B033	HH2O	09/27/94	EPA8010	CHLOROETHANE	21	5	A
IR26	IR26B033	HH2O	09/27/94	EPA8010	TRICHLORODIFLUOROMETHANE	23	5	A
IR26	IR26B033	HH2O	09/27/94	EPA8010	FREON 113	150	5	A
IR26	IR26B033	HH2O	09/27/94	LUFTG	TPH-GASOLINE	71	50	A
IR26	IR26B034	GH2O	09/28/94	LUFTD	TPH-MOTOR OIL	200	100	A
IR26	IR26B035	GH2O	09/29/94	LUFTD	TPH-MOTOR OIL	100	100	A
IR26	IR26B037A	HH2O	10/18/94	LUFTD	TPH-MOTOR OIL	1200	100	A
IR26	IR26B038	GH2O	10/13/94	LUFTD	TPH-MOTOR OIL	750	200	A
IR26	IR26B039	HH2O	10/14/94	EPA8010	DICHLORODIFLUOROMETHANE	5	1	A
IR26	IR26B039	HH2O	10/14/94	EPA8010	FREON 113	5	1	A
IR26	IR26B039	HH2O	10/14/94	LUFTD	TPH-MOTOR OIL	780	100	A
IR26	IR26MW36A	H2O	10/14/94	LUFTD	TPH-MOTOR OIL	590	100	V
IR26	IR26MW40A	H2O	12/06/94	LUFTD	TPH-MOTOR OIL	170	100	A
IR26	IR26MW41A	H2O	11/16/94	LUFTD	TPH-MOTOR OIL	400	100	V

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR46	IR46B014	HH2O	01/19/94	EPA8010	1,2-DICHLOROBENZENE	5	1	A
IR46	IR46B014	HH2O	01/19/94	EPA8020	1,4-DICHLOROBENZENE	1	1	A
IR46	IR46B014	HH2O	01/19/94	EPA8020	1,2-DICHLOROBENZENE	5	1	A
IR46	IR46B014	HH2O	01/19/94	LUFTD	TPH-DIESEL	190	100	A
IR46	IR46B014	HH2O	01/19/94	LUFTD	TPH-MOTOR OIL	410	100	A
IR46	IR46B015	HH2O	01/20/94	LUFTD	TPH-DIESEL	5500	500	A
IR46	IR46B015	HH2O	01/20/94	LUFTD	TPH-MOTOR OIL	560	500	A
IR46	IR46B015	HH2O	01/20/94	LUFTG	TPH-GASOLINE	2000000	250000	J*
IR46	IR46B016	HH2O	01/06/94	LUFTD	TPH-DIESEL	270000	10000	A
IR46	IR46B016	HH2O	01/06/94	LUFTD	TPH-DIESEL	81000	2500	A
IR46	IR46B016	HH2O	01/06/94	LUFTG	TPH-GASOLINE	4500000	1200000	J*
IR46	IR46B016	HH2O	01/06/94	LUFTG	TPH-GASOLINE	600000	50000	J*
IR46	IR46B018	HH2O	01/06/94	LUFTD	TPH-DIESEL	88000	2500	A
IR46	IR46B018	HH2O	01/06/94	LUFTD	TPH-DIESEL	10000	500	A
IR46	IR46B018	HH2O	01/06/94	LUFTG	TPH-GASOLINE	230000	25000	J*
IR46	IR46B018	HH2O	01/06/94	LUFTG	TPH-GASOLINE	1700	500	J*
IR46	IR46B019	HH2O	01/05/94	LUFTD	TPH-DIESEL	490000	13000	A
IR46	IR46B019	HH2O	01/05/94	LUFTD	TPH-DIESEL	10000	500	A
IR46	IR46B019	HH2O	01/05/94	LUFTD	TPH-MOTOR OIL	1000	500	A
IR46	IR46B019	HH2O	01/05/94	LUFTG	TPH-GASOLINE	930000	250000	J*
IR46	IR46B019	HH2O	01/05/94	LUFTG	TPH-GASOLINE	960	500	A
IR46	IR46B022	HH2O	02/01/94	LUFTD	TPH-MOTOR OIL	180	100	A
IR46	IR46B023	HH2O	02/02/94	LUFTD	TPH-DIESEL	1000	100	A
IR46	IR46B023	HH2O	02/02/94	LUFTD	TPH-DIESEL	1500	100	A
IR46	IR46B023	HH2O	02/02/94	LUFTG	TPH-GASOLINE	130	50	J*
IR46	IR46B025	HH2O	02/16/94	LUFTD	TPH-DIESEL	1300	500	A
IR46	IR46B025	HH2O	02/16/94	LUFTD	TPH-DIESEL	220	100	A
IR46	IR46B025	HH2O	02/16/94	LUFTD	TPH-MOTOR OIL	110	100	A
IR46	IR46B025	HH2O	02/16/94	LUFTG	TPH-GASOLINE	1000	250	A
IR46	IR46B027	HH2O	02/03/94	EPA8010	1,1-DICHLOROETHANE	2	1	J3
IR46	IR46B027	HH2O	02/03/94	LUFTD	TPH-DIESEL	11000000	650000	J3
IR46	IR46B027	HH2O	02/03/94	LUFTD	TPH-DIESEL	780	100	A
IR46	IR46B027	HH2O	02/03/94	LUFTG	TPH-GASOLINE	210000	50000	J*
IR46	IR46B028	HH2O	02/14/94	LUFTD	TPH-MOTOR OIL	1400	220	A
IR46	IR46B029	HH2O	02/11/94	LUFTD	TPH-MOTOR OIL	920	100	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,2-DICHLOROETHANE	9	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,1,1-TRICHLOROETHANE	2	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,1-DICHLOROETHANE	21	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,1-DICHLOROETHENE	9	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,2-DICHLOROETHANE	2	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,1-DICHLOROETHANE	6	1	A
IR46	IR46B030	HH2O	02/10/94	EPA8010	1,1-DICHLOROETHENE	1	1	A
IR46	IR46B030	HH2O	02/10/94	LUFTD	TPH-MOTOR OIL	660	100	A
IR46	IR46B030	HH2O	02/10/94	LUFTD	TPH-MOTOR OIL	5000	500	A
IR46	IR46B031	HH2O	02/15/94	EPA8010	1,1-DICHLOROETHANE	1	1	A
IR46	IR46B031	HH2O	02/15/94	EPA8010	1,1-DICHLOROETHANE	3	1	A
IR46	IR46B031	HH2O	02/15/94	EPA8020	METHYL ETHYL KETONE	7	5	A
IR46	IR46B031	HH2O	02/15/94	LUFTD	TPH-DIESEL	150	100	A
IR46	IR46B031	HH2O	02/15/94	LUFTD	TPH-MOTOR OIL	240	100	A
IR46	IR46B032	HH2O	03/17/94	EPA8020	METHYL ETHYL KETONE	41	5	A
IR46	IR46B032	HH2O	03/17/94	LUFTD	TPH-DIESEL	220	100	A
IR46	IR46B032	HH2O	03/17/94	LUFTD	TPH-MOTOR OIL	950	100	A
IR46	IR46B032	HH2O	03/17/94	LUFTG	TPH-GASOLINE	56	50	A
IR46	IR46B033	HH2O	03/18/94	EPA8020	METHYL ETHYL KETONE	22	5	A
IR46	IR46B033	HH2O	03/18/94	LUFTD	TPH-DIESEL	250	100	A
IR46	IR46B033	HH2O	03/18/94	LUFTD	TPH-MOTOR OIL	610	100	A
IR46	IR46B034	HH2O	03/15/94	EPA8020	METHYL ETHYL KETONE	72	5	A

TABLE B-1

**DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR46	IR46B034	HH2O	03/15/94	LUFTD	TPH-DIESEL	130	100	A
IR46	IR46B034	HH2O	03/15/94	LUFTD	TPH-MOTOR OIL	1800	100	A
IR46	IR46B034A	HH2O	03/14/94	EPA8020	METHYL ETHYL KETONE	21	5	A
IR46	IR46B034A	HH2O	03/14/94	LUFTD	TPH-MOTOR OIL	200	100	A
IR46	IR46B035	HH2O	03/16/94	EPA8020	METHYL ETHYL KETONE	9	5	A
IR46	IR46B035	HH2O	03/16/94	EPA8020	METHYL ETHYL KETONE	35	5	A
IR46	IR46B036	HH2O	03/16/94	EPA8020	METHYL ETHYL KETONE	5	5	A
IR46	IR46B044	GH2O	09/08/94	LUFTD	TPH-DIESEL	130	100	A
IR46	IR46B044	GH2O	09/08/94	LUFTD	TPH-MOTOR OIL	160	100	A
IR46	IR46B044	HH2O	09/08/94	LUFTD	TPH-MOTOR OIL	240	100	A
IR46	IR46B045	HH2O	09/09/94	EPA8010	1,1-DICHLOROETHANE	3	1	A
IR46	IR46B045	HH2O	09/09/94	EPA8010	1,1-DICHLOROETHANE	3	1	A
IR46	IR46B045	HH2O	09/09/94	LUFTD	TPH-DIESEL	160	100	Y
IR46	IR46MW37A	H2O	03/23/94	LUFTD	TPH-MOTOR OIL	230	100	V
IR46	IR46MW38A	H2O	08/11/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	1.4	1	A
IR46	IR46MW38A	H2O	03/24/94	LUFTD	TPH-DIESEL	570	100	A
IR46	IR46MW38A	H2O	08/11/94	LUFTD	TPH-DIESEL	3300	500	A
IR46	IR46MW39A	H2O	03/24/94	LUFTD	TPH-DIESEL	240	100	A
IR46	IR46MW39A	H2O	08/11/94	LUFTD	TPH-DIESEL	1000	100	A
IR46	IR46MW39A	H2O	08/11/94	LUFTD	TPH-MOTOR OIL	250	100	A
IR46	IR46MW39A	H2O	03/24/94	LUFTG	TPH-GASOLINE	220	50	A
IR46	IR46MW39A	H2O	08/11/94	LUFTG	TPH-GASOLINE	180	50	A
IR46	IR46MW39A2	H2O	07/14/94	LUFTD	TPH-DIESEL	120	100	V
IR46	IR46MW39A2	H2O	08/24/94	LUFTD	TPH-DIESEL	140	100	A
IR46	IR46MW39A2	H2O	08/24/94	LUFTD	TPH-MOTOR OIL	500	100	A
IR46	IR46MW39A3	H2O	07/15/94	LUFTD	TPH-MOTOR OIL	390	100	A
IR46	IR46MW39A3	H2O	08/24/94	LUFTD	TPH-MOTOR OIL	130	100	A
IR46	IR46MW40A	H2O	04/28/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	6.1	2	V
IR46	IR46MW40A	H2O	08/26/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	9.3	5	V
IR46	IR46MW40A	H2O	04/28/94	LUFTD	TPH-DIESEL	3200	200	V
IR46	IR46MW40A	H2O	08/26/94	LUFTD	TPH-DIESEL	17000	1000	V
IR46	IR46MW40A	H2O	08/26/94	LUFTD	TPH-MOTOR OIL	1200	1000	V
IR46	IR46MW40A2	H2O	07/19/94	LUFTD	TPH-DIESEL	1200	100	A
IR46	IR46MW40A2	H2O	07/19/94	LUFTD	TPH-MOTOR OIL	1100	100	A
IR46	IR46MW40A2	H2O	08/18/94	LUFTD	TPH-MOTOR OIL	390	100	A
IR46	IR46MW40A3	H2O	07/18/94	LUFTD	TPH-MOTOR OIL	670	100	V
IR46	IR46MW40A3	H2O	08/18/94	LUFTD	TPH-MOTOR OIL	420	100	A
IR46	IR46MW41A	H2O	08/26/94	LUFTD	TPH-MOTOR OIL	290	100	A
IR46	IR46MW42A	H2O	05/31/94	LUFTD	TPH-MOTOR OIL	110	100	A
IR46	IR46MW42A	H2O	08/23/94	LUFTD	TPH-MOTOR OIL	530	100	V
IR46	IR46MW43A	H2O	05/31/94	LUFTD	TPH-MOTOR OIL	200	100	A
UT02	UT02B005	HH2O	01/04/94	LUFTD	TPH-DIESEL	630	500	A
UT02	UT02B005	HH2O	01/04/94	LUFTG	TPH-GASOLINE	720	500	J*
UT02	UT02B007	HH2O	12/17/93	LUFTD	TPH-DIESEL	540	500	A
UT02	UT02B011	GH2O	03/22/94	LUFTD	TPH-MOTOR OIL	200	100	A
UT02	UT02B012	HH2O	03/23/94	LUFTD	TPH-MOTOR OIL	110	100	A
UT02	UT02B013	GH2O	03/17/94	LUFTD	TPH-MOTOR OIL	160	100	A
UT02	UT02B014	HH2O	03/23/94	EPA8010	CIS-1,2-DICHLOROETHENE	5	1	A
UT02	UT02B014	HH2O	03/23/94	EPA8010	TRANS-1,2-DICHLOROETHENE	2	1	A
UT02	UT02B014	HH2O	03/23/94	EPA8010	TRICHLOROETHENE	5	1	A
UT02	UT02B014	HH2O	03/23/94	LUFTD	TPH-MOTOR OIL	150	100	A
UT02	UT02MW15A	H2O	05/19/94	CLPPEST	ALPHA-BHC	0.05	0.05	J35
UT02	UT02MW15A	H2O	05/19/94	CLPPEST	BETA-BHC	0.14	0.05	J35
UT02	UT02MW15A	H2O	05/19/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	23.3	0.63	A
UT02	UT02MW15A	H2O	08/08/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	1.9	1	A
UT02	UT02MW15A	H2O	05/19/94	LUFTD	TPH-DIESEL	34	1	A
UT02	UT02MW15A	H2O	08/08/94	LUFTD	TPH-DIESEL	3700	500	A

TABLE B-1

DETECTED RESULTS FOR ORGANIC COMPOUNDS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
UT02	UT02MW16A	H2O	06/02/94	EPA418.1	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	1.6	1	A
UT02	UT02MW16A	H2O	06/02/94	LUFTD	TPH-MOTOR OIL	1200	100	A
UT02	UT02MW16A	H2O	08/08/94	LUFTD	TPH-MOTOR OIL	110	100	V
UT02	UT02MW17A	H2O	06/02/94	LUFTD	TPH-MOTOR OIL	1200	100	A
UT03	UT03B003	HH2O	01/05/94	LUFTD	TPH-DIESEL	1100	500	A
UT03	UT03B008	HH2O	03/23/94	LUFTD	TPH-MOTOR OIL	140	100	A
UT03	UT03B009	HH2O	03/24/94	LUFTD	TPH-MOTOR OIL	100	100	A
UT03	UT03MW11A	H2O	06/03/94	LUFTD	TPH-MOTOR OIL	840	100	V
UT03	UT03MW12A	H2O	06/02/94	LUFTD	TPH-MOTOR OIL	110	100	A
UT03	UT03MW12A	H2O	08/10/94	LUFTG	TPH-GASOLINE	86	50	V

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW22A	H2O	07/15/91	CLPFUAA	LEAD	2.4	1.2	J2
IR06	IR06MW22A	H2O	06/12/90	CLPFUAA	ARSENIC	4.9	2	A
IR06	IR06MW22A	H2O	07/15/91	CLPFUAA	ARSENIC	12.1	2.5	A
IR06	IR06MW22A	H2O	01/06/92	CLPFUAA	ARSENIC	5	1.4	VJ3
IR06	IR06MW22A	H2O	01/04/91	CLPICP	IRON	429	14	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	IRON	1460	11.9	A
IR06	IR06MW22A	H2O	06/12/90	CLPICP	MAGNESIUM	129000	31.3	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	MAGNESIUM	144000	24.7	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	MAGNESIUM	228000	39.6	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	MAGNESIUM	196000	28.7	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	MANGANESE	644	0.52	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	MANGANESE	1150	0.38	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	MANGANESE	1730	0.5	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	MANGANESE	1170	0.4	VA
IR06	IR06MW22A	H2O	07/15/91	CLPICP	NICKEL	17.8	15.2	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	NICKEL	45.9	17.8	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	POTASSIUM	10300	374	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	POTASSIUM	7460	333	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	POTASSIUM	5980	308	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	POTASSIUM	4500	767	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	SODIUM	163000	164	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	SODIUM	262000	41.7	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	SODIUM	106000	24.9	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	SODIUM	88200	35.9	VA
IR06	IR06MW22A	H2O	05/17/94	CLPICP	ARSENIC	7.65	1.3	A
IR06	IR06MW22A	H2O	08/30/94	CLPICP	ARSENIC	14.25	1.5	A
IR06	IR06MW22A	H2O	06/12/90	CLPICP	BARIUM	61.9	0.63	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	BARIUM	125	0.7	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	BARIUM	67.2	0.48	J4
IR06	IR06MW22A	H2O	01/06/92	CLPICP	BARIUM	82.9	0.42	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	BERYLLIUM	0.37	0.33	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	COBALT	5.3	4.9	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	COBALT	16	10.4	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	VANADIUM	6.9	2.3	A
IR06	IR06MW22A	H2O	06/12/90	CLPICP	ZINC	6.9	2	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	ZINC	10.1	1.9	A
IR06	IR06MW22A	H2O	01/06/92	CLPICP	ZINC	43	6.1	VA
IR06	IR06MW22A	H2O	06/12/90	CLPICP	CALCIUM	33800	36.6	A
IR06	IR06MW22A	H2O	01/04/91	CLPICP	CALCIUM	36300	16.3	A
IR06	IR06MW22A	H2O	07/15/91	CLPICP	CALCIUM	34200	30.7	J4
IR06	IR06MW22A	H2O	01/06/92	CLPICP	CALCIUM	31700	12.2	VJ4
IR06	IR06MW22A	H2O	11/05/93	EPA7060	ARSENIC	11.93	3.3	A
IR06	IR06MW23A	H2O	07/16/91	CLPFUAA	LEAD	1.9	1.2	A
IR06	IR06MW23A	H2O	06/13/90	CLPFUAA	ARSENIC	2.1	2	A
IR06	IR06MW23A	H2O	06/13/90	CLPFUAA	ARSENIC	2.6	2	A
IR06	IR06MW23A	H2O	01/07/91	CLPFUAA	ARSENIC	3.9	2.9	VA

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW23A	H2O	01/07/91	CLPFUAA	ARSENIC	3.4	2.9	A
IR06	IR06MW23A	H2O	07/16/91	CLPFUAA	ARSENIC	2.5	2.5	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	IRON	87.4	21.2	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	IRON	118	21.2	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	IRON	329	11.9	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	IRON	365	11.9	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	IRON	193	6.3	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	IRON	151	6.3	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	MAGNESIUM	102000	31.3	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	MAGNESIUM	103000	31.3	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	MAGNESIUM	78600	24.7	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	MAGNESIUM	79400	24.7	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	MAGNESIUM	107000	39.6	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	MAGNESIUM	110000	39.6	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	MAGNESIUM	103000	28.7	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	MAGNESIUM	99800	28.7	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	MANGANESE	633	0.52	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	MANGANESE	638	0.52	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	MANGANESE	626	0.38	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	MANGANESE	630	0.38	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	MANGANESE	770	0.5	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	MANGANESE	788	0.5	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	MANGANESE	719	0.4	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	MANGANESE	689	0.4	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	NICKEL	18.4	15.2	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	NICKEL	30.8	15.2	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	POTASSIUM	4370	374	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	POTASSIUM	4590	374	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	POTASSIUM	1680	333	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	POTASSIUM	1800	333	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	POTASSIUM	1030	308	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	POTASSIUM	1990	308	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	POTASSIUM	1910	767	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	POTASSIUM	1740	767	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	SODIUM	65200	164	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	SODIUM	67000	164	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	SODIUM	43400	41.7	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	SODIUM	43000	41.7	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	SODIUM	51300	24.9	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	SODIUM	53300	24.9	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	SODIUM	50100	35.9	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	SODIUM	48400	35.9	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	ANTIMONY	23.6	20.1	A
IR06	IR06MW23A	H2O	08/19/94	CLPICP	ARSENIC	1.47	1.5	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	BARIUM	94.1	0.63	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	BARIUM	94.5	0.63	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW23A	H2O	01/07/91	CLPICP	BARIUM	114	0.7	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	BARIUM	114	0.7	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	BARIUM	246	0.48	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	BARIUM	254	0.48	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	BARIUM	210	0.42	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	BARIUM	205	0.42	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	BERYLLIUM	0.37	0.33	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	COPPER	3.1	1.3	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	VANADIUM	5.3	2.3	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	VANADIUM	4.9	2.3	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	ZINC	11.9	2	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	ZINC	11.2	2	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	ZINC	20.4	1.9	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	ZINC	21.3	1.9	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	ZINC	15.9	1.6	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	ZINC	19	1.6	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	ZINC	8.3	6.1	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	CALCIUM	28000	36.6	A
IR06	IR06MW23A	H2O	06/13/90	CLPICP	CALCIUM	28400	36.6	A
IR06	IR06MW23A	H2O	01/07/91	CLPICP	CALCIUM	23400	16.3	VA
IR06	IR06MW23A	H2O	01/07/91	CLPICP	CALCIUM	23500	16.3	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	CALCIUM	31000	30.7	A
IR06	IR06MW23A	H2O	07/16/91	CLPICP	CALCIUM	31500	30.7	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	CALCIUM	27900	12.2	A
IR06	IR06MW23A	H2O	01/07/92	CLPICP	CALCIUM	26800	12.2	A
IR06	IR06MW23A	H2O	11/03/93	EPA7060	ARSENIC	4.56	3.3	J3
IR06	IR06MW27A	H2O	06/12/90	CLPFUAA	ARSENIC	3.2	2	A
IR06	IR06MW27A	H2O	01/04/91	CLPFUAA	ARSENIC	5.9	2.9	A
IR06	IR06MW27A	H2O	07/16/91	CLPFUAA	ARSENIC	11.1	2.5	A
IR06	IR06MW27A	H2O	01/07/92	CLPFUAA	ARSENIC	11.4	1.4	A
IR06	IR06MW27A	H2O	06/12/90	CLPFUAA	SELENIUM	2.4	2.2	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	IRON	987	14	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	IRON	1210	11.9	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	IRON	4130	6.3	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	MAGNESIUM	104000	31.3	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	MAGNESIUM	109000	24.7	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	MAGNESIUM	127000	39.6	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	MAGNESIUM	115000	28.7	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	MANGANESE	997	0.52	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	MANGANESE	2380	0.38	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	MANGANESE	2480	0.5	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	MANGANESE	1940	0.4	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	NICKEL	37.2	20.2	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	NICKEL	71.6	15.2	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	NICKEL	51.2	17.8	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	POTASSIUM	10400	374	A

TABLE B-2

DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW27A	H2O	01/04/91	CLPICP	POTASSIUM	3800	333	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	POTASSIUM	3650	308	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	POTASSIUM	3550	767	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	SODIUM	237000	164	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	SODIUM	215000	41.7	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	SODIUM	208000	24.9	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	SODIUM	209000	35.9	A
IR06	IR06MW27A	H2O	05/17/94	CLPICP	ARSENIC	11.19	1.3	V
IR06	IR06MW27A	H2O	08/30/94	CLPICP	ARSENIC	8.09	1.5	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	BARIUM	198	0.63	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	BARIUM	197	0.7	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	BARIUM	166	0.48	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	BARIUM	191	0.42	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	BERYLLIUM	0.37	0.33	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	COBALT	6.6	4.9	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	COBALT	12	10.4	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	COPPER	2	1.3	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	VANADIUM	10.7	2.3	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	ZINC	7.9	2	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	ZINC	15.6	1.9	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	ZINC	11	1.6	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	ZINC	7.5	6.1	A
IR06	IR06MW27A	H2O	06/12/90	CLPICP	CALCIUM	38000	36.6	A
IR06	IR06MW27A	H2O	01/04/91	CLPICP	CALCIUM	32200	16.3	A
IR06	IR06MW27A	H2O	07/16/91	CLPICP	CALCIUM	34100	30.7	A
IR06	IR06MW27A	H2O	01/07/92	CLPICP	CALCIUM	27300	12.2	A
IR06	IR06MW27A	H2O	11/05/93	EPA7060	ARSENIC	7.73	3.3	A
IR06	IR06MW30A	H2O	06/12/90	CLPFUAA	ARSENIC	3.2	2	A
IR06	IR06MW30A	H2O	06/12/90	CLPFUAA	ARSENIC	2.8	2	A
IR06	IR06MW30A	H2O	07/15/91	CLPFUAA	ARSENIC	2.6	2.5	A
IR06	IR06MW30A	H2O	01/09/92	CLPFUAA	ARSENIC	2.9	1.4	A
IR06	IR06MW30A	H2O	01/09/92	CLPFUAA	ARSENIC	2.5	1.4	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	IRON	92.7	14	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	IRON	78.5	14	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	IRON	109	11.9	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	IRON	105	11.9	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	MAGNESIUM	117000	31.3	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	MAGNESIUM	120000	31.3	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	MAGNESIUM	140000	24.7	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	MAGNESIUM	146000	24.7	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	MAGNESIUM	141000	39.6	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	MAGNESIUM	141000	39.6	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	MAGNESIUM	125000	28.7	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	MAGNESIUM	129000	28.7	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	MANGANESE	1160	0.52	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	MANGANESE	1190	0.52	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW30A	H2O	01/04/91	CLPICP	MANGANESE	1820	0.38	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	MANGANESE	1890	0.38	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	MANGANESE	1860	0.5	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	MANGANESE	1850	0.5	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	MANGANESE	1720	0.4	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	MANGANESE	1750	0.4	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	NICKEL	21.6	20.2	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	NICKEL	43.5	15.2	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	NICKEL	17.3	15.2	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	POTASSIUM	6470	374	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	POTASSIUM	7210	374	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	POTASSIUM	3780	333	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	POTASSIUM	4020	333	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	POTASSIUM	3140	308	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	POTASSIUM	2980	308	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	POTASSIUM	3530	767	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	POTASSIUM	3460	767	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	SODIUM	125000	164	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	SODIUM	128000	164	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	SODIUM	111000	41.7	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	SODIUM	114000	41.7	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	SODIUM	105000	24.9	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	SODIUM	106000	24.9	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	SODIUM	109000	35.9	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	SODIUM	106000	35.9	A
IR06	IR06MW30A	H2O	08/23/94	CLPICP	ARSENIC	2.88	1.5	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	BARIUM	38.2	0.63	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	BARIUM	39.3	0.63	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	BARIUM	121	0.7	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	BARIUM	125	0.7	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	BARIUM	137	0.48	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	BARIUM	138	0.48	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	BARIUM	132	0.42	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	BARIUM	137	0.42	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	COBALT	7.6	4.9	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	VANADIUM	4.8	2.3	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	VANADIUM	6	2.3	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	VANADIUM	2.7	1.6	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	ZINC	9.2	2	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	ZINC	11	2	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	CALCIUM	23300	36.6	A
IR06	IR06MW30A	H2O	06/12/90	CLPICP	CALCIUM	24200	36.6	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	CALCIUM	22700	16.3	A
IR06	IR06MW30A	H2O	01/04/91	CLPICP	CALCIUM	23800	16.3	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	CALCIUM	21800	30.7	A
IR06	IR06MW30A	H2O	07/15/91	CLPICP	CALCIUM	21600	30.7	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW30A	H2O	01/09/92	CLPICP	CALCIUM	20300	12.2	A
IR06	IR06MW30A	H2O	01/09/92	CLPICP	CALCIUM	20500	12.2	A
IR06	IR06MW30A	H2O	11/03/93	EPA7060	ARSENIC	6.2	3.3	A
IR06	IR06MW32A	H2O	01/07/91	CLPFUAA	ARSENIC	5.4	2.9	A
IR06	IR06MW32A	H2O	07/17/91	CLPFUAA	ARSENIC	3.7	2.5	A
IR06	IR06MW32A	H2O	01/10/92	CLPFUAA	ARSENIC	4.2	1.4	VA
IR06	IR06MW32A	H2O	01/07/91	CLPICP	IRON	996	14	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	IRON	2440	11.9	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	IRON	3630	6.3	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	MAGNESIUM	330000	31.3	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	MAGNESIUM	281000	24.7	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	MAGNESIUM	282000	39.6	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	MAGNESIUM	205000	28.7	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	MANGANESE	6190	0.52	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	MANGANESE	5350	0.38	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	MANGANESE	5440	0.5	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	MANGANESE	3790	0.4	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	NICKEL	29.7	20.2	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	NICKEL	25	22.9	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	NICKEL	41.7	15.2	A
IR06	IR06MW32A	H2O	06/12/90	CLPICP	POTASSIUM	10200	374	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	POTASSIUM	8010	333	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	POTASSIUM	7390	308	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	POTASSIUM	8120	767	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	SODIUM	302000	164	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	SODIUM	260000	41.7	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	SODIUM	260000	24.9	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	SODIUM	213000	35.9	VA
IR06	IR06MW32A	H2O	05/18/94	CLPICP	ARSENIC	3.13	1.3	J6
IR06	IR06MW32A	H2O	08/24/94	CLPICP	ARSENIC	5.15	1.5	V
IR06	IR06MW32A	H2O	06/12/90	CLPICP	BARIUM	391	0.63	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	BARIUM	586	0.7	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	BARIUM	638	0.48	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	BARIUM	475	0.42	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	CADMIUM	4	3.7	A
IR06	IR06MW32A	H2O	06/12/90	CLPICP	COBALT	8.2	7	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	COPPER	1.6	1.6	VA
IR06	IR06MW32A	H2O	06/12/90	CLPICP	VANADIUM	18.1	2.3	A
IR06	IR06MW32A	H2O	06/12/90	CLPICP	ZINC	11.9	2	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	ZINC	48.6	1.9	A
IR06	IR06MW32A	H2O	06/12/90	CLPICP	CALCIUM	118000	36.6	A
IR06	IR06MW32A	H2O	01/07/91	CLPICP	CALCIUM	101000	16.3	A
IR06	IR06MW32A	H2O	07/17/91	CLPICP	CALCIUM	96700	30.7	A
IR06	IR06MW32A	H2O	01/10/92	CLPICP	CALCIUM	71800	12.2	VA
IR06	IR06MW32A	H2O	11/04/93	EPA7060	ARSENIC	7.65	3.3	A
IR06	IR06MW34A	H2O	03/31/93	CLPCN	CYANIDE	0.76	0.4	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW34A	H2O	03/31/93	CLPCVAA	MERCURY	0.14	0.05	A
IR06	IR06MW34A	H2O	03/31/93	CLPFUAA	LEAD	9.91	1.3	J23
IR06	IR06MW34A	H2O	01/04/91	CLPFUAA	ARSENIC	3.6	2.9	A
IR06	IR06MW34A	H2O	07/15/91	CLPFUAA	ARSENIC	3.7	2.5	A
IR06	IR06MW34A	H2O	01/09/92	CLPFUAA	ARSENIC	4.5	1.4	A
IR06	IR06MW34A	H2O	03/31/93	CLPFUAA	ARSENIC	2.63	2.6	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	ALUMINUM	22.45	20.1	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	IRON	6960	21.2	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	IRON	8970	14	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	IRON	11900	11.9	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	IRON	11000	6.3	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	IRON	3659.49	18.8	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	MAGNESIUM	400000	31.3	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	MAGNESIUM	432000	24.7	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	MAGNESIUM	422000	39.6	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	MAGNESIUM	305000	28.7	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	MAGNESIUM	135332	43.9	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	MANGANESE	2540	0.52	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	MANGANESE	4460	0.38	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	MANGANESE	4080	0.5	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	MANGANESE	2730	0.4	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	MANGANESE	1160.57	0.6	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	NICKEL	22.8	20.2	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	NICKEL	21.2	15.2	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	POTASSIUM	39200	374	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	POTASSIUM	35300	333	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	POTASSIUM	35000	308	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	POTASSIUM	26000	767	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	POTASSIUM	15653.6	315	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	SODIUM	1220000	328	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	SODIUM	1310000	208	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	SODIUM	1240000	24.9	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	SODIUM	859000	35.9	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	SODIUM	605652	51.3	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	ANTIMONY	15.8	14.3	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	ANTIMONY	35.6	27.6	A
IR06	IR06MW34A	H2O	08/19/94	CLPICP	ARSENIC	4.51	1.5	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	BARIUM	595	0.63	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	BARIUM	758	0.7	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	BARIUM	862	0.48	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	BARIUM	650	0.42	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	BARIUM	320.39	4.9	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	BERYLLIUM	0.56	0.33	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	COBALT	7.2	7	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	COBALT	12.1	10.4	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	VANADIUM	21.8	2.3	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW34A	H2O	01/04/91	CLPICP	VANADIUM	29.9	2.1	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	VANADIUM	2.5	1.6	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	VANADIUM	2.49	1.9	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	ZINC	16.4	2	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	ZINC	6.7	6.1	A
IR06	IR06MW34A	H2O	06/13/90	CLPICP	CALCIUM	138000	36.6	A
IR06	IR06MW34A	H2O	01/04/91	CLPICP	CALCIUM	154000	16.3	A
IR06	IR06MW34A	H2O	07/15/91	CLPICP	CALCIUM	144000	30.7	A
IR06	IR06MW34A	H2O	01/09/92	CLPICP	CALCIUM	108000	12.2	A
IR06	IR06MW34A	H2O	03/31/93	CLPICP	CALCIUM	60833.5	39.7	A
IR06	IR06MW34A	H2O	11/04/93	EPA7060	ARSENIC	4.47	3.3	A
IR06	IR06MW35A	H2O	06/11/90	CLPFUAA	ARSENIC	4	2	A
IR06	IR06MW35A	H2O	01/04/91	CLPFUAA	ARSENIC	6.4	2.9	A
IR06	IR06MW35A	H2O	07/17/91	CLPFUAA	ARSENIC	4.1	2.5	A
IR06	IR06MW35A	H2O	01/08/92	CLPFUAA	ARSENIC	5.2	1.4	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	ALUMINUM	23.1	15.3	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	MAGNESIUM	71300	31.3	A
IR06	IR06MW35A	H2O	01/04/91	CLPICP	MAGNESIUM	39200	24.7	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	MAGNESIUM	28100	39.6	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	MAGNESIUM	26000	28.7	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	MANGANESE	123	0.52	A
IR06	IR06MW35A	H2O	01/04/91	CLPICP	MANGANESE	282	0.38	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	MANGANESE	159	0.5	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	MANGANESE	160	0.4	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	MOLYBDENUM	10.2	3.3	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	POTASSIUM	12900	374	A
IR06	IR06MW35A	H2O	01/04/91	CLPICP	POTASSIUM	13600	333	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	POTASSIUM	15200	308	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	POTASSIUM	13800	767	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	SODIUM	469000	164	A
IR06	IR06MW35A	H2O	01/04/91	CLPICP	SODIUM	639000	41.7	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	SODIUM	613000	24.9	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	SODIUM	563000	35.9	A
IR06	IR06MW35A	H2O	05/13/94	CLPICP	ARSENIC	3.96	1.3	A
IR06	IR06MW35A	H2O	08/19/94	CLPICP	ARSENIC	4.85	1.5	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	BARIUM	73.8	0.63	A
IR06	IR06MW35A	H2O	01/04/91	CLPICP	BARIUM	66.6	0.7	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	BARIUM	52.6	0.48	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	BARIUM	61.6	0.42	A
IR06	IR06MW35A	H2O	08/19/94	CLPICP	CHROMIUM	0.9	0.7	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	COPPER	3.1	1.3	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	VANADIUM	7	2.3	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	VANADIUM	11.6	3.9	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	ZINC	16.8	2	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	ZINC	11.9	1.6	A
IR06	IR06MW35A	H2O	06/11/90	CLPICP	CALCIUM	19600	36.6	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW35A	H2O	01/04/91	CLPICP	CALCIUM	10100	16.3	A
IR06	IR06MW35A	H2O	07/17/91	CLPICP	CALCIUM	7360	30.7	A
IR06	IR06MW35A	H2O	01/08/92	CLPICP	CALCIUM	6770	12.2	A
IR06	IR06MW40A	H2O	06/13/90	CLPFUAA	ARSENIC	3.2	2	A
IR06	IR06MW40A	H2O	01/04/91	CLPFUAA	ARSENIC	5.1	2.9	A
IR06	IR06MW40A	H2O	07/17/91	CLPFUAA	ARSENIC	2.8	2.5	J3
IR06	IR06MW40A	H2O	01/09/92	CLPFUAA	ARSENIC	2	1.4	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	ALUMINUM	15.7	15.3	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	IRON	156	14	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	MAGNESIUM	319000	31.3	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	MAGNESIUM	825000	24.7	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MAGNESIUM	796000	39.6	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MAGNESIUM	702000	39.6	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	MAGNESIUM	520000	28.7	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	MANGANESE	551	0.52	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	MANGANESE	4110	0.38	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MANGANESE	2760	0.5	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MANGANESE	2430	0.5	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	MANGANESE	1370	0.4	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MOLYBDENUM	25.9	3.3	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	MOLYBDENUM	24.6	3.3	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	NICKEL	39.8	15.2	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	NICKEL	32.8	15.2	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	POTASSIUM	36800	374	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	POTASSIUM	33300	333	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	POTASSIUM	21800	308	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	POTASSIUM	20700	308	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	POTASSIUM	22700	767	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	SODIUM	945000	164	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	SODIUM	931000	41.7	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	SODIUM	668000	24.9	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	SODIUM	657000	24.9	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	SODIUM	673000	35.9	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	ANTIMONY	14.4	14.3	A
IR06	IR06MW40A	H2O	05/13/94	CLPICP	ARSENIC	2.9	1.3	A
IR06	IR06MW40A	H2O	08/19/94	CLPICP	ARSENIC	2.14	1.5	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	BARIUM	117	0.63	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	BARIUM	78.8	0.7	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	BARIUM	55	0.48	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	BARIUM	49.2	0.48	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	BARIUM	49.2	0.42	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	BERYLLIUM	0.37	0.33	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	COBALT	8.3	4.9	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	COBALT	11.3	4.9	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	COPPER	58.2	1.7	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	COPPER	3.5	1.3	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g}/\text{L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW40A	H2O	06/13/90	CLPICP	VANADIUM	23.8	2.3	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	VANADIUM	56.7	2.1	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	ZINC	14.3	2	A
IR06	IR06MW40A	H2O	06/13/90	CLPICP	CALCIUM	83500	36.6	A
IR06	IR06MW40A	H2O	01/04/91	CLPICP	CALCIUM	167000	16.3	A
IR06	IR06MW40A	H2O	07/17/91	CLPICP	CALCIUM	141000	30.7	J4
IR06	IR06MW40A	H2O	07/17/91	CLPICP	CALCIUM	125000	30.7	A
IR06	IR06MW40A	H2O	01/09/92	CLPICP	CALCIUM	91800	12.2	A
IR06	IR06MW40A	H2O	11/08/93	EPA7060	ARSENIC	7.09	3.1	A
IR06	IR06MW41A	H2O	06/11/90	CLPFUAA	ARSENIC	2.2	2	A
IR06	IR06MW41A	H2O	06/11/90	CLPFUAA	ARSENIC	2	2	A
IR06	IR06MW41A	H2O	01/03/91	CLPFUAA	ARSENIC	10.5	2.5	A
IR06	IR06MW41A	H2O	07/16/91	CLPFUAA	ARSENIC	9.7	2.5	A
IR06	IR06MW41A	H2O	01/08/92	CLPFUAA	ARSENIC	12.5	1.4	A
IR06	IR06MW41A	H2O	01/08/92	CLPFUAA	ARSENIC	12.3	1.4	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	IRON	1490	21.2	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	IRON	1060	21.2	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	IRON	1090	14	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	IRON	8250	11.9	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	IRON	4380	6.3	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	IRON	4040	6.3	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	MAGNESIUM	228000	31.3	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	MAGNESIUM	232000	31.3	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	MAGNESIUM	367000	24.7	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	MAGNESIUM	659000	39.6	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	MAGNESIUM	546000	28.7	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	MAGNESIUM	505000	28.7	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	MANGANESE	735	0.52	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	MANGANESE	749	0.52	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	MANGANESE	3420	0.38	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	MANGANESE	8860	0.5	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	MANGANESE	7150	0.4	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	MANGANESE	6340	0.4	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	NICKEL	18.9	15.2	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	NICKEL	18.3	17.8	A
IR06	IR06MW41A	H2O	05/13/94	CLPICP	NICKEL	14.57	1.8	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	POTASSIUM	28100	374	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	POTASSIUM	28600	374	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	POTASSIUM	24700	333	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	POTASSIUM	11700	308	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	POTASSIUM	14500	767	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	POTASSIUM	15700	767	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	SODIUM	577000	164	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	SODIUM	586000	164	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	SODIUM	612000	41.7	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	SODIUM	448000	24.9	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW41A	H2O	01/08/92	CLPICP	SODIUM	514000	35.9	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	SODIUM	531000	35.9	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	ANTIMONY	31.8	27.6	A
IR06	IR06MW41A	H2O	05/13/94	CLPICP	ARSENIC	8.36	1.3	A
IR06	IR06MW41A	H2O	08/19/94	CLPICP	ARSENIC	4.34	1.5	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	BARIUM	377	0.63	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	BARIUM	381	0.63	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	BARIUM	587	0.7	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	BARIUM	901	0.48	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	BARIUM	929	0.42	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	BARIUM	919	0.42	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	COBALT	8.8	4.9	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	COBALT	15.2	10.4	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	VANADIUM	11.6	2.3	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	VANADIUM	11.2	2.3	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	VANADIUM	26.6	2.1	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	ZINC	11.7	2	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	ZINC	9.9	2	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	ZINC	10.8	1.6	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	ZINC	16.6	6.1	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	ZINC	9.3	6.1	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	CALCIUM	62400	36.6	A
IR06	IR06MW41A	H2O	06/11/90	CLPICP	CALCIUM	63200	36.6	A
IR06	IR06MW41A	H2O	01/03/91	CLPICP	CALCIUM	80000	16.3	A
IR06	IR06MW41A	H2O	07/16/91	CLPICP	CALCIUM	110000	30.7	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	CALCIUM	94600	12.2	A
IR06	IR06MW41A	H2O	01/08/92	CLPICP	CALCIUM	88900	12.2	A
IR06	IR06MW41A	H2O	11/08/93	EPA7060	ARSENIC	14.11	3.1	A
IR06	IR06MW42A	H2O	01/10/91	CLPFUAA	ARSENIC	8.3	2.9	VA
IR06	IR06MW42A	H2O	07/16/91	CLPFUAA	ARSENIC	9.5	2.5	A
IR06	IR06MW42A	H2O	01/10/92	CLPFUAA	ARSENIC	6.6	1.4	A
IR06	IR06MW42A	H2O	01/10/92	CLPFUAA	ARSENIC	6.5	1.4	A
IR06	IR06MW42A	H2O	06/13/90	CLPFUAA	SELENIUM	2.3	2.2	A
IR06	IR06MW42A	H2O	06/13/90	CLPICP	IRON	1270	21.2	A
IR06	IR06MW42A	H2O	01/10/91	CLPICP	IRON	1870	14	VA
IR06	IR06MW42A	H2O	07/16/91	CLPICP	IRON	4220	11.9	A
IR06	IR06MW42A	H2O	01/10/92	CLPICP	IRON	7060	6.3	A
IR06	IR06MW42A	H2O	01/10/92	CLPICP	IRON	7400	6.3	A
IR06	IR06MW42A	H2O	06/13/90	CLPICP	MAGNESIUM	236000	31.3	A
IR06	IR06MW42A	H2O	01/10/91	CLPICP	MAGNESIUM	299000	24.7	VA
IR06	IR06MW42A	H2O	07/16/91	CLPICP	MAGNESIUM	152000	39.6	A
IR06	IR06MW42A	H2O	01/10/92	CLPICP	MAGNESIUM	135000	28.7	A
IR06	IR06MW42A	H2O	01/10/92	CLPICP	MAGNESIUM	136000	28.7	A
IR06	IR06MW42A	H2O	06/13/90	CLPICP	MANGANESE	3040	0.52	A
IR06	IR06MW42A	H2O	01/10/91	CLPICP	MANGANESE	5880	0.38	VA
IR06	IR06MW42A	H2O	07/16/91	CLPICP	MANGANESE	1940	0.5	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g}/\text{L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	MANGANESE	1430	0.4	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	MANGANESE	1410	0.4	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	NICKEL	21.1	20.2	A
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	NICKEL	22.3	15.2	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	POTASSIUM	30000	374	A
IR06	IR06MW42A	H2O	01/10/91	CLP/CP	POTASSIUM	35100	333	VA
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	POTASSIUM	26100	308	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	POTASSIUM	23800	767	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	POTASSIUM	24000	767	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	SODIUM	780000	164	A
IR06	IR06MW42A	H2O	01/10/91	CLP/CP	SODIUM	938000	41.7	VA
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	SODIUM	640000	24.9	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	SODIUM	599000	35.9	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	SODIUM	605000	35.9	A
IR06	IR06MW42A	H2O	05/16/94	CLP/CP	ARSENIC	3.05	1.3	A
IR06	IR06MW42A	H2O	08/26/94	CLP/CP	ARSENIC	5.04	1.5	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	BARIUM	359	0.63	A
IR06	IR06MW42A	H2O	01/10/91	CLP/CP	BARIUM	565	0.7	VA
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	BARIUM	397	0.48	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	BARIUM	362	0.42	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	BARIUM	363	0.42	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	COBALT	11	7	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	VANADIUM	11.8	2.3	A
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	VANADIUM	1.7	1.6	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	ZINC	21	2	A
IR06	IR06MW42A	H2O	01/10/91	CLP/CP	ZINC	36.6	1.9	VA
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	ZINC	22.5	6.1	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	ZINC	20.8	6.1	A
IR06	IR06MW42A	H2O	06/13/90	CLP/CP	CALCIUM	113000	36.6	A
IR06	IR06MW42A	H2O	01/10/91	CLP/CP	CALCIUM	125000	16.3	VA
IR06	IR06MW42A	H2O	07/16/91	CLP/CP	CALCIUM	68800	30.7	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	CALCIUM	60500	12.2	A
IR06	IR06MW42A	H2O	01/10/92	CLP/CP	CALCIUM	61000	12.2	A
IR06	IR06MW42A	H2O	11/08/93	EPA7060	ARSENIC	10.5	3.1	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	IRON	794	6.3	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	IRON	504	6.3	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	MAGNESIUM	915000	28.7	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	MAGNESIUM	748000	28.7	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	MANGANESE	4930	0.4	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	MANGANESE	5050	0.4	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	NICKEL	117	17.8	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	NICKEL	89.4	17.8	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	POTASSIUM	16800	767	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	POTASSIUM	11800	767	A
IR06	IR06MW44A	H2O	10/31/91	CLP/CP	SODIUM	793000	35.9	A
IR06	IR06MW44A	H2O	01/07/92	CLP/CP	SODIUM	714000	35.9	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW44A	H2O	01/07/92	CLPICP	ANTIMONY	40.1	27.6	A
IR06	IR06MW44A	H2O	08/25/94	CLPICP	ARSENIC	3.04	1.5	A
IR06	IR06MW44A	H2O	10/31/91	CLPICP	BARIUM	23.2	0.42	A
IR06	IR06MW44A	H2O	01/07/92	CLPICP	BARIUM	13.9	0.42	A
IR06	IR06MW44A	H2O	01/07/92	CLPICP	CADMIUM	6.4	2.3	A
IR06	IR06MW44A	H2O	10/31/91	CLPICP	COBALT	16.7	10.4	A
IR06	IR06MW44A	H2O	01/07/92	CLPICP	COBALT	14.4	10.4	A
IR06	IR06MW44A	H2O	10/31/91	CLPICP	COPPER	1.9	1.6	A
IR06	IR06MW44A	H2O	01/07/92	CLPICP	ZINC	49.8	6.1	A
IR06	IR06MW44A	H2O	10/31/91	CLPICP	CALCIUM	217000	12.2	A
IR06	IR06MW44A	H2O	01/07/92	CLPICP	CALCIUM	175000	12.2	A
IR06	IR06MW45A	H2O	10/31/91	CLPFUAA	ARSENIC	2.5	1.4	A
IR06	IR06MW45A	H2O	10/31/91	CLPFUAA	SELENIUM	3.1	2.5	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	MAGNESIUM	156000	28.7	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	MAGNESIUM	220000	28.7	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	MANGANESE	370	0.4	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	MANGANESE	26.8	0.4	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	MOLYBDENUM	5.1	3.1	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	NICKEL	35.2	17.8	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	POTASSIUM	27800	767	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	POTASSIUM	63800	767	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	SODIUM	1020000	35.9	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	SODIUM	2120000	180	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	ANTIMONY	33.5	27.6	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	BARIUM	68	0.42	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	BARIUM	56.1	0.42	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	COPPER	10.9	1.6	A
IR06	IR06MW45A	H2O	10/31/91	CLPICP	CALCIUM	111000	12.2	A
IR06	IR06MW45A	H2O	01/13/92	CLPICP	CALCIUM	100000	12.2	A
IR06	IR06MW46A	H2O	10/31/91	CLPFUAA	ARSENIC	3.7	1.4	A
IR06	IR06MW46A	H2O	11/01/91	CLPFUAA	ARSENIC	3.6	1.4	A
IR06	IR06MW46A	H2O	01/08/92	CLPFUAA	ARSENIC	2.5	1.4	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	MAGNESIUM	392000	28.7	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	MAGNESIUM	394000	28.7	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	MAGNESIUM	600000	28.7	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	MANGANESE	148	0.4	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	MANGANESE	132	0.4	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	MANGANESE	187	0.4	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	MOLYBDENUM	24.4	3.1	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	MOLYBDENUM	26.3	3.1	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	MOLYBDENUM	21.8	3.1	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	NICKEL	38.7	17.8	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	NICKEL	49.7	17.8	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	NICKEL	42.4	17.8	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	POTASSIUM	7180	767	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	POTASSIUM	7130	767	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW46A	H2O	01/08/92	CLPICP	POTASSIUM	9520	767	VA
IR06	IR06MW46A	H2O	10/31/91	CLPICP	SODIUM	216000	35.9	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	SODIUM	215000	35.9	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	SODIUM	267000	35.9	VA
IR06	IR06MW46A	H2O	01/08/92	CLPICP	ANTIMONY	28.4	27.6	VA
IR06	IR06MW46A	H2O	08/25/94	CLPICP	ARSENIC	2.64	1.5	A
IR06	IR06MW46A	H2O	10/31/91	CLPICP	BARIUM	35.4	0.42	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	BARIUM	35.4	0.42	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	BARIUM	59.1	0.42	VA
IR06	IR06MW46A	H2O	08/25/94	CLPICP	CHROMIUM	1.27	0.7	A
IR06	IR06MW46A	H2O	10/31/91	CLPICP	COPPER	1.8	1.6	A
IR06	IR06MW46A	H2O	10/31/91	CLPICP	CALCIUM	160000	12.2	A
IR06	IR06MW46A	H2O	11/01/91	CLPICP	CALCIUM	161000	12.2	A
IR06	IR06MW46A	H2O	01/08/92	CLPICP	CALCIUM	230000	12.2	VJ4
IR06	IR06MW47F	H2O	11/04/91	CLPFUAA	ARSENIC	2	1.4	A
IR06	IR06MW47F	H2O	01/09/92	CLPFUAA	ARSENIC	2	1.4	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	MAGNESIUM	191000	28.7	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	MAGNESIUM	133000	28.7	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	MANGANESE	90.4	0.4	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	MANGANESE	85.8	0.4	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	MOLYBDENUM	13.1	3.1	A
IR06	IR06MW47F	H2O	11/04/91	CLPICP	NICKEL	95.4	17.8	A
IR06	IR06MW47F	H2O	11/04/91	CLPICP	POTASSIUM	25000	767	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	POTASSIUM	20800	767	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	SODIUM	1240000	35.9	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	SODIUM	843000	35.9	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	BARIUM	115	0.42	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	BARIUM	85.4	0.42	VA
IR06	IR06MW47F	H2O	01/09/92	CLPICP	CHROMIUM	3.5	3	VA
IR06	IR06MW47F	H2O	08/29/94	CLPICP	CHROMIUM	3.96	0.7	VJ9
IR06	IR06MW47F	H2O	11/04/91	CLPICP	VANADIUM	7.7	3.9	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	VANADIUM	9.4	3.9	VA
IR06	IR06MW47F	H2O	11/04/91	CLPICP	CALCIUM	44100	12.2	A
IR06	IR06MW47F	H2O	01/09/92	CLPICP	CALCIUM	40100	12.2	VA
IR06	IR06MW48F	H2O	11/04/91	CLPFUAA	ARSENIC	7.9	1.4	A
IR06	IR06MW48F	H2O	01/08/92	CLPFUAA	ARSENIC	4	1.4	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	MAGNESIUM	43800	28.7	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	MAGNESIUM	55800	28.7	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	MANGANESE	188	0.4	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	MANGANESE	728	0.4	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	MOLYBDENUM	35.6	3.1	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	POTASSIUM	14700	767	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	POTASSIUM	11800	767	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	SODIUM	344000	35.9	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	SODIUM	185000	35.9	A
IR06	IR06MW48F	H2O	08/19/94	CLPICP	ARSENIC	1.67	1.5	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW48F	H2O	11/04/91	CLPICP	BARIUM	29.3	0.42	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	BARIUM	57.1	0.42	A
IR06	IR06MW48F	H2O	11/04/91	CLPICP	CALCIUM	17500	12.2	A
IR06	IR06MW48F	H2O	01/08/92	CLPICP	CALCIUM	18000	12.2	A
IR06	IR06MW48F	H2O	11/08/93	EPA7060	ARSENIC	4.67	3.1	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	MAGNESIUM	71400	28.7	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	MAGNESIUM	81200	28.7	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	MAGNESIUM	79300	28.7	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	MANGANESE	0.69	0.4	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	POTASSIUM	1820	767	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	POTASSIUM	1720	767	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	POTASSIUM	1670	767	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	SODIUM	78600	35.9	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	SODIUM	80700	35.9	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	SODIUM	78300	35.9	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	BARIUM	12.2	0.42	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	BARIUM	11.9	0.42	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	BARIUM	11.9	0.42	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	CHROMIUM	90.6	3	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	CHROMIUM	101	3	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	CHROMIUM	96	3	A
IR06	IR06MW49F	H2O	05/16/94	CLPICP	CHROMIUM	78.79	0.9	V
IR06	IR06MW49F	H2O	08/19/94	CLPICP	CHROMIUM	83.92	0.7	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	COBALT	10.7	10.4	A
IR06	IR06MW49F	H2O	10/31/91	CLPICP	CALCIUM	12700	12.2	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	CALCIUM	13300	12.2	A
IR06	IR06MW49F	H2O	01/06/92	CLPICP	CALCIUM	12900	12.2	A
IR06	IR06MW49F	H2O	11/08/93	EPA6010	CHROMIUM	81.06	2.3	A
IR06	IR06MW49F	H2O	02/16/94	EPA6010	CHROMIUM	87.8	2.3	A
IR06	IR06MW49F	H2O	11/08/93	EPA7060	ARSENIC	3.78	3.1	A
IR06	IR06MW49F	H2O	10/31/91	EPA7196	CHROMIUM VI	100	10	A
IR06	IR06MW49F	H2O	01/06/92	EPA7196	CHROMIUM VI	120	10	A
IR06	IR06MW49F	H2O	01/06/92	EPA7196	CHROMIUM VI	110	10	A
IR06	IR06MW49F	H2O	11/08/93	EPA7196	CHROMIUM VI	87.8	10	A
IR06	IR06MW49F	H2O	02/16/94	EPA7196	CHROMIUM VI	82.9	10	A
IR06	IR06MW49F	H2O	05/16/94	EPA7196	CHROMIUM VI	91.1	10	V
IR06	IR06MW49F	H2O	08/19/94	EPA7196	CHROMIUM VI	83.2	10	A
IR06	IR06MW50F	H2O	12/14/93	CLPCVAA	MERCURY	0.17	0.1	A
IR06	IR06MW50F	H2O	08/16/94	CLPCVAA	MERCURY	0.3	0.1	A
IR06	IR06MW50F	H2O	05/25/95	CLPCVAA	MERCURY	0.12	0.1	
IR06	IR06MW50F	H2O	12/14/93	CLPFUAA	ARSENIC	3.45	3.3	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	ALUMINUM	39.63	13.7	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	MAGNESIUM	115360	26.2	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	MAGNESIUM	124411	40.8	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	MAGNESIUM	148470	26.9	
IR06	IR06MW50F	H2O	05/25/95	CLPICP	MANGANESE	1.64	0.2	

TABLE B-2

DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW50F	H2O	12/14/93	CLPICP	POTASSIUM	13200.9	610	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	POTASSIUM	24961.5	58.5	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	POTASSIUM	12800.3	543	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	SODIUM	367055	37.8	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	SODIUM	174554	136.2	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	SODIUM	394958	128.6	
IR06	IR06MW50F	H2O	05/25/95	CLPICP	THALLIUM	1.98	1.5	
IR06	IR06MW50F	H2O	08/16/94	CLPICP	ANTIMONY	10.8	1.2	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	ANTIMONY	4.16	1.9	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	ARSENIC	16.99	2.7	A
IR06	IR06MW50F	H2O	12/14/93	CLPICP	BARIUM	47.13	7.2	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	BARIUM	47.58	4.1	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	BARIUM	53.73	0.4	
IR06	IR06MW50F	H2O	05/25/95	CLPICP	BERYLLIUM	0.15	0.1	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	CHROMIUM	118.32	2.5	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	CHROMIUM	108.04	0.7	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	CHROMIUM	112.67	1	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	COPPER	2.32	1.6	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	COPPER	25.71	1.7	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	COPPER	4.34	0.5	
IR06	IR06MW50F	H2O	05/25/95	CLPICP	VANADIUM	1.42	0.7	
IR06	IR06MW50F	H2O	08/16/94	CLPICP	ZINC	6.81	3.1	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	ZINC	19.61	0.3	
IR06	IR06MW50F	H2O	12/14/93	CLPICP	CALCIUM	28271.5	12	A
IR06	IR06MW50F	H2O	08/16/94	CLPICP	CALCIUM	23911.1	128.8	A
IR06	IR06MW50F	H2O	05/25/95	CLPICP	CALCIUM	23847.2	11.9	
IR06	IR06MW51F	H2O	12/22/93	CLPFUAA	THALLIUM	0.19	2.1	J3
IR06	IR06MW51F	H2O	12/22/93	CLPICP	MAGNESIUM	249805	26.2	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	MAGNESIUM	241044	40.8	A
IR06	IR06MW51F	H2O	12/22/93	CLPICP	MANGANESE	218.53	0.6	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	MANGANESE	195.68	0.3	A
IR06	IR06MW51F	H2O	12/22/93	CLPICP	POTASSIUM	13225	610	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	POTASSIUM	23329.5	58.5	J4
IR06	IR06MW51F	H2O	12/22/93	CLPICP	SODIUM	1348243	37.8	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	SODIUM	1446673	136.2	A
IR06	IR06MW51F	H2O	12/22/93	CLPICP	BARIUM	38.63	7.2	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	BARIUM	45.41	4.1	A
IR06	IR06MW51F	H2O	12/22/93	CLPICP	CALCIUM	90784.6	12	A
IR06	IR06MW51F	H2O	08/16/94	CLPICP	CALCIUM	83145.8	128.8	A
IR06	IR06MW52F	H2O	12/27/93	CLPFUAA	ARSENIC	7.39	3.2	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	ALUMINUM	46.52	35.3	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	ALUMINUM	51.63	13.7	
IR06	IR06MW52F	H2O	08/11/94	CLPICP	IRON	44.97	18.8	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	IRON	24.49	10.1	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	MAGNESIUM	3975.59	51.1	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	MAGNESIUM	3273.71	40.8	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW52F	H2O	05/25/95	CLPICP	MAGNESIUM	3156.35	26.9	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	MANGANESE	15.88	0.9	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	MANGANESE	9.8	0.3	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	MANGANESE	1.79	0.2	
IR06	IR06MW52F	H2O	08/11/94	CLPICP	MOLYBDENUM	31.3	0.4	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	MOLYBDENUM	28.65	0.8	
IR06	IR06MW52F	H2O	08/11/94	CLPICP	NICKEL	3.95	2.5	A
IR06	IR06MW52F	H2O	12/27/93	CLPICP	POTASSIUM	6931.25	420.8	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	POTASSIUM	19884.7	58.5	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	POTASSIUM	9425.8	543	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	SODIUM	359343	45.4	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	SODIUM	424290	136.2	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	SODIUM	332811	128.6	
IR06	IR06MW52F	H2O	05/25/95	CLPICP	ANTIMONY	5.37	1.9	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	ARSENIC	11.71	3.3	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	ARSENIC	5.11	1.5	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	ARSENIC	5.79	1.4	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	BARIUM	8.8	5.6	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	BARIUM	14	4.1	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	BARIUM	13.1	0.4	
IR06	IR06MW52F	H2O	08/11/94	CLPICP	CADMIUM	1.08	0.2	A
IR06	IR06MW52F	H2O	12/27/93	CLPICP	CHROMIUM	3.12	2.3	A
IR06	IR06MW52F	H2O	12/27/93	CLPICP	COPPER	5.93	1.2	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	COPPER	11.77	1.7	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	COPPER	4.47	0.5	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	VANADIUM	11.04	2.7	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	VANADIUM	12.66	1.1	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	VANADIUM	10.91	0.7	
IR06	IR06MW52F	H2O	05/25/95	CLPICP	ZINC	18.65	0.3	
IR06	IR06MW52F	H2O	12/27/93	CLPICP	CALCIUM	4859.02	84.7	A
IR06	IR06MW52F	H2O	08/11/94	CLPICP	CALCIUM	4074.76	128.8	A
IR06	IR06MW52F	H2O	05/25/95	CLPICP	CALCIUM	3180.91	11.9	
IR06	IR06MW53F	H2O	08/11/94	CLPICP	ALUMINUM	36.56	35.3	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	ALUMINUM	39.28	13.7	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	MAGNESIUM	9668.77	51.1	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	MAGNESIUM	9560.54	40.8	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	MAGNESIUM	9326.04	26.9	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	MANGANESE	17.82	0.9	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	MANGANESE	24.49	0.3	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	MANGANESE	2.65	0.2	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	MOLYBDENUM	258.08	0.6	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	MOLYBDENUM	257.8	0.4	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	MOLYBDENUM	255.7	0.8	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	NICKEL	3.54	1	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	NICKEL	5.31	2.5	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	NICKEL	2.51	1.3	

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW53F	H2O	03/15/94	CLPICP	POTASSIUM	20273.7	420.8	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	POTASSIUM	44987.2	58.5	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	POTASSIUM	21400.1	543	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	SODIUM	668893	45.4	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	SODIUM	774512	136.2	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	SODIUM	631801	128.6	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	ANTIMONY	4.99	1.9	A
IR06	IR06MW53F	H2O	03/15/94	CLPICP	ARSENIC	8.16	1.2	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	ARSENIC	6.45	1.5	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	ARSENIC	7.26	1.4	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	BARIUM	3.77	3.4	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	BARIUM	11.42	0.4	
IR06	IR06MW53F	H2O	08/11/94	CLPICP	CADMIUM	9.24	0.2	A
IR06	IR06MW53F	H2O	03/15/94	CLPICP	COPPER	7.31	0.5	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	COPPER	31.21	1.7	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	COPPER	9.04	0.5	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	VANADIUM	8.38	2.7	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	VANADIUM	9.66	1.1	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	VANADIUM	9.38	0.7	
IR06	IR06MW53F	H2O	05/25/95	CLPICP	ZINC	25.02	0.3	
IR06	IR06MW53F	H2O	03/15/94	CLPICP	CALCIUM	7958.31	84.7	A
IR06	IR06MW53F	H2O	08/11/94	CLPICP	CALCIUM	6041.98	128.8	A
IR06	IR06MW53F	H2O	05/25/95	CLPICP	CALCIUM	5413.23	11.9	
IR06	IR06MW54F	H2O	12/15/93	CLPICP	MAGNESIUM	66109.7	26.2	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	MAGNESIUM	68310.2	40.8	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	POTASSIUM	953.84	610	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	POTASSIUM	797.58	58.5	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	SODIUM	53479.3	37.8	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	SODIUM	57789.4	136.2	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	ANTIMONY	3.63	1.2	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	BARIUM	45.58	7.2	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	BARIUM	37.82	4.1	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	CHROMIUM	51.62	2.5	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	CHROMIUM	54.96	0.7	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	COPPER	2.2	1.6	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	COPPER	2.44	1.7	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	VANADIUM	1.4	1.1	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	CALCIUM	23699.8	12	A
IR06	IR06MW54F	H2O	08/16/94	CLPICP	CALCIUM	15870.2	128.8	A
IR06	IR06MW54F	H2O	12/15/93	CLPICP	SELENIUM	9.99	27	A
IR06	IR06MW55F	H2O	12/28/93	CLPFUAA	ARSENIC	3.52	3.2	A
IR06	IR06MW55F	H2O	12/28/93	CLPICP	MAGNESIUM	50902.5	51.1	A
IR06	IR06MW55F	H2O	08/17/94	CLPICP	MAGNESIUM	40946.1	40.8	V
IR06	IR06MW55F	H2O	12/28/93	CLPICP	POTASSIUM	1711.55	420.8	A
IR06	IR06MW55F	H2O	08/17/94	CLPICP	POTASSIUM	4940.32	58.5	V
IR06	IR06MW55F	H2O	12/28/93	CLPICP	SODIUM	35836.9	45.4	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW55F	H2O	08/17/94	CLPICP	SODIUM	87108.6	136.2	V
IR06	IR06MW55F	H2O	12/28/93	CLPICP	CHROMIUM	10.61	2.3	A
IR06	IR06MW55F	H2O	08/17/94	CLPICP	CHROMIUM	7.49	0.7	V
IR06	IR06MW55F	H2O	12/28/93	CLPICP	COPPER	3.33	1.2	A
IR06	IR06MW55F	H2O	08/17/94	CLPICP	VANADIUM	3.33	1.1	V
IR06	IR06MW55F	H2O	12/28/93	CLPICP	CALCIUM	8653.01	84.7	A
IR06	IR06MW56F	H2O	01/07/94	CLPFUAA	ARSENIC	3.88	3.2	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	ALUMINUM	24.19	13.7	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	MAGNESIUM	74935.2	51.1	A
IR06	IR06MW56F	H2O	08/17/94	CLPICP	MAGNESIUM	77341.5	40.8	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	MAGNESIUM	81158.4	26.9	
IR06	IR06MW56F	H2O	05/25/95	CLPICP	MANGANESE	0.62	0.2	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	POTASSIUM	3144.86	420.8	A
IR06	IR06MW56F	H2O	08/17/94	CLPICP	POTASSIUM	3755.96	58.5	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	POTASSIUM	2084.81	543	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	SODIUM	55158.7	115.4	A
IR06	IR06MW56F	H2O	08/17/94	CLPICP	SODIUM	74511.3	136.2	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	SODIUM	54973.7	128.6	
IR06	IR06MW56F	H2O	05/25/95	CLPICP	THALLIUM	1.62	1.5	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	ARSENIC	68.34	3.2	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	ARSENIC	2.96	1.4	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	BARIUM	9.28	5.6	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	BARIUM	6.19	0.4	
IR06	IR06MW56F	H2O	05/25/95	CLPICP	CHROMIUM	3.19	1	
IR06	IR06MW56F	H2O	05/25/95	CLPICP	COPPER	3.62	0.5	
IR06	IR06MW56F	H2O	08/17/94	CLPICP	VANADIUM	8.75	1.1	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	VANADIUM	4.69	0.7	
IR06	IR06MW56F	H2O	05/25/95	CLPICP	ZINC	14.67	0.3	
IR06	IR06MW56F	H2O	01/07/94	CLPICP	CALCIUM	15526.3	84.7	A
IR06	IR06MW56F	H2O	05/25/95	CLPICP	CALCIUM	3085.26	11.9	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	ALUMINUM	33.85	13.7	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	IRON	16.62	10.1	
IR06	IR06MW57F	H2O	09/20/94	CLPICP	MAGNESIUM	36624	40.8	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	MAGNESIUM	47583	26.9	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	MANGANESE	0.7	0.2	
IR06	IR06MW57F	H2O	09/20/94	CLPICP	POTASSIUM	6636.73	58.5	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	POTASSIUM	4982.33	543	
IR06	IR06MW57F	H2O	09/20/94	CLPICP	SODIUM	89670.2	136.2	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	SODIUM	64433.7	128.6	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	THALLIUM	1.97	1.5	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	ANTIMONY	4.51	1.9	
IR06	IR06MW57F	H2O	09/20/94	CLPICP	BARIUM	7.07	4.1	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	BARIUM	5.22	0.4	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	BERYLLIUM	0.13	0.1	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	COBALT	0.55	0.4	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	COPPER	1.79	0.5	

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR06	IR06MW57F	H2O	09/20/94	CLPICP	VANADIUM	3.42	1.1	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	VANADIUM	3.05	0.7	
IR06	IR06MW57F	H2O	05/24/95	CLPICP	ZINC	18.78	0.3	
IR06	IR06MW57F	H2O	09/20/94	CLPICP	CALCIUM	7168.82	128.8	A
IR06	IR06MW57F	H2O	05/24/95	CLPICP	CALCIUM	3173.82	11.9	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	ALUMINUM	28.47	13.7	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	IRON	12.1	10.1	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	MAGNESIUM	86900	100.3	A
IR06	IR06MW58F	H2O	08/17/94	CLPICP	MAGNESIUM	82021.2	40.8	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	MAGNESIUM	64755.6	26.9	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	MANGANESE	1.32	0.2	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	NICKEL	7.9	0.7	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	NICKEL	1.71	1.3	
IR06	IR06MW58F	H2O	08/17/94	CLPICP	POTASSIUM	5350.81	58.5	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	POTASSIUM	7376.33	543	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	SODIUM	61500	193.5	A
IR06	IR06MW58F	H2O	08/17/94	CLPICP	SODIUM	89029.5	136.2	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	SODIUM	73071.8	128.6	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	ANTIMONY	4.61	1.9	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	BARIUM	9.2	2	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	BARIUM	8.95	0.4	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	BERYLLIUM	0.13	0.1	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	CHROMIUM	23.4	0.4	A
IR06	IR06MW58F	H2O	08/17/94	CLPICP	CHROMIUM	17.72	0.7	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	CHROMIUM	7.03	1	
IR06	IR06MW58F	H2O	05/24/95	CLPICP	COPPER	3.2	0.5	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	VANADIUM	1.3	0.5	A
IR06	IR06MW58F	H2O	08/17/94	CLPICP	VANADIUM	1.75	1.1	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	VANADIUM	1.96	0.7	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	ZINC	3.8	2.2	A
IR06	IR06MW58F	H2O	05/24/95	CLPICP	ZINC	16.8	0.3	
IR06	IR06MW58F	H2O	06/21/94	CLPICP	CALCIUM	7350	40.4	J4
IR06	IR06MW58F	H2O	05/24/95	CLPICP	CALCIUM	3484.68	11.9	
IR07	IR07B046	GH2O	06/15/92	CLPFUAA	LEAD	2.7	1.6	J3
IR07	IR07MW19A	H2O	07/30/91	CLPICP	MAGNESIUM	959000	39.6	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	MAGNESIUM	943000	28.7	VJ4
IR07	IR07MW19A	H2O	06/05/92	CLPICP	MAGNESIUM	801000	21.6	VA
IR07	IR07MW19A	H2O	07/30/91	CLPICP	MANGANESE	14.6	0.5	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	MANGANESE	8.7	0.4	VJ47
IR07	IR07MW19A	H2O	07/30/91	CLPICP	NICKEL	27.6	15.2	A
IR07	IR07MW19A	H2O	06/05/92	CLPICP	NICKEL	42.5	17.3	VJ3
IR07	IR07MW19A	H2O	07/30/91	CLPICP	POTASSIUM	321000	308	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	POTASSIUM	291000	767	VA
IR07	IR07MW19A	H2O	06/05/92	CLPICP	POTASSIUM	240000	414	VA
IR07	IR07MW19A	H2O	07/30/91	CLPICP	SODIUM	8570000	498	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	SODIUM	7710000	35.9	VA

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MW19A	H2O	06/05/92	CLPICP	SODIUM	7390000	417	VA
IR07	IR07MW19A	H2O	07/30/91	CLPICP	BARIUM	89.4	0.48	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	BARIUM	67.5	0.42	VA
IR07	IR07MW19A	H2O	06/05/92	CLPICP	BARIUM	79.7	0.6	VA
IR07	IR07MW19A	H2O	06/05/92	CLPICP	CADMIUM	2.8	2.7	VA
IR07	IR07MW19A	H2O	12/05/91	CLPICP	ZINC	27.1	6.1	VA
IR07	IR07MW19A	H2O	07/30/91	CLPICP	CALCIUM	289000	30.7	A
IR07	IR07MW19A	H2O	12/05/91	CLPICP	CALCIUM	278000	12.2	VJ4
IR07	IR07MW19A	H2O	06/05/92	CLPICP	CALCIUM	250000	37.2	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPFUAA	ARSENIC	1.9	1.4	J3
IR07	IR07MW20A1	H2O	12/02/91	CLPFUAA	SELENIUM	26	25	J3
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	ALUMINUM	17.8	15.3	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	IRON	1260	11.9	VJ4
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	MAGNESIUM	983000	39.6	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	MAGNESIUM	1060000	28.7	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	MAGNESIUM	912000	21.6	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	MANGANESE	124	0.5	VJ49
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	MANGANESE	10.4	0.4	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	MANGANESE	1640	0.53	J3
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	NICKEL	59.1	15.2	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	NICKEL	29.6	17.8	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	NICKEL	51.8	17.3	J3
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	POTASSIUM	366000	308	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	POTASSIUM	349000	767	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	POTASSIUM	295000	414	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	SODIUM	8630000	498	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	SODIUM	9240000	35.9	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	SODIUM	8670000	417	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	BARIUM	60.9	0.48	VJ4
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	BARIUM	52	0.42	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	BARIUM	30.5	0.6	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	CADMIUM	5.6	2.7	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	CHROMIUM	5.8	2.1	VA
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	CHROMIUM	3.6	3	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	COBALT	6.4	4.9	VA
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	COBALT	8.9	8.8	J3
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	VANADIUM	2.3	1.4	A
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	ZINC	9.9	6.1	A
IR07	IR07MW20A1	H2O	07/25/91	CLPICP	CALCIUM	289000	30.7	VJ4
IR07	IR07MW20A1	H2O	12/02/91	CLPICP	CALCIUM	296000	12.2	A
IR07	IR07MW20A1	H2O	06/01/92	CLPICP	CALCIUM	278000	37.2	A
IR07	IR07MW20A2	H2O	07/29/91	CLPFUAA	ARSENIC	4.1	2.5	A
IR07	IR07MW20A2	H2O	12/04/91	CLPFUAA	ARSENIC	3.1	1.4	J3
IR07	IR07MW20A2	H2O	06/04/92	CLPFUAA	ARSENIC	3.2	2	J3
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	MAGNESIUM	1330000	78.4	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	MAGNESIUM	1170000	28.7	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	MAGNESIUM	1230000	108	A
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	MANGANESE	4510	0.5	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	MANGANESE	4330	0.4	J7
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	MANGANESE	4310	0.53	J3
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	NICKEL	91.1	15.2	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	NICKEL	102	17.8	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	NICKEL	82.8	17.3	J3
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	POTASSIUM	26300	308	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	POTASSIUM	24300	767	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	POTASSIUM	25400	414	A
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	SODIUM	2060000	74.7	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	SODIUM	1860000	35.9	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	SODIUM	1990000	208	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	ANTIMONY	33.2	31.1	A
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	BARIUM	721	0.48	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	BARIUM	672	0.42	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	BARIUM	672	0.6	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	CADMIUM	4.4	2.7	A
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	COBALT	21.9	4.9	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	COBALT	30.4	10.4	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	COBALT	26.2	8.8	J3
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	COPPER	35.1	1.3	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	COPPER	13.5	1.6	J7
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	COPPER	29.7	1.8	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	VANADIUM	1.6	1.4	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	ZINC	15.3	6.1	A
IR07	IR07MW20A2	H2O	07/29/91	CLPICP	CALCIUM	278000	30.7	A
IR07	IR07MW20A2	H2O	12/04/91	CLPICP	CALCIUM	263000	12.2	A
IR07	IR07MW20A2	H2O	06/04/92	CLPICP	CALCIUM	268000	37.2	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	MAGNESIUM	161000	39.6	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	MAGNESIUM	183000	28.7	A
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	MAGNESIUM	153000	21.6	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	MANGANESE	891	0.5	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	MANGANESE	976	0.4	J7
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	MANGANESE	812	0.53	J3
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	NICKEL	18	15.2	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	NICKEL	30	17.8	A
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	NICKEL	44.6	17.3	J3
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	POTASSIUM	19000	308	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	POTASSIUM	19600	767	A
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	POTASSIUM	18000	414	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	SODIUM	302000	24.9	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	SODIUM	333000	35.9	A
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	SODIUM	320000	41.7	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	BARIUM	91.6	0.48	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	BARIUM	108	0.42	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	BARIUM	93.5	0.6	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	ZINC	13.2	1.6	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	ZINC	6.2	6.1	A
IR07	IR07MW21A1	H2O	07/29/91	CLPICP	CALCIUM	99300	30.7	A
IR07	IR07MW21A1	H2O	12/04/91	CLPICP	CALCIUM	111000	12.2	A
IR07	IR07MW21A1	H2O	06/03/92	CLPICP	CALCIUM	98400	37.2	A
IR07	IR07MW21A2	H2O	12/02/91	CLPFUAA	ARSENIC	3.2	1.4	VJ3
IR07	IR07MW21A2	H2O	06/01/92	CLPFUAA	ARSENIC	4.4	2	VJ3
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	ALUMINUM	29.3	21.6	VA
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	IRON	116	6.3	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	IRON	613	11.3	VA
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	MAGNESIUM	676000	39.6	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	MAGNESIUM	743000	28.7	VJ4
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	MAGNESIUM	734000	21.6	VJ4
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	MANGANESE	6.2	0.5	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	MANGANESE	5800	0.4	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	MANGANESE	6260	0.53	VJ3
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	MOLYBDENUM	4.6	3.1	VJ7
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	NICKEL	50.4	15.2	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	NICKEL	71.8	17.8	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	NICKEL	31.4	17.3	VJ3
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	POTASSIUM	68000	308	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	POTASSIUM	70600	767	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	POTASSIUM	74000	414	VA
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	SODIUM	3560000	124	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	SODIUM	3720000	180	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	SODIUM	4180000	417	VA
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	BARIUM	1030	0.48	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	BARIUM	1180	0.42	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	BARIUM	1040	0.6	VA
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	COBALT	12.1	4.9	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	COBALT	21.8	10.4	VA
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	COBALT	17	8.8	VJ3
IR07	IR07MW21A2	H2O	07/25/91	CLPICP	CALCIUM	376000	30.7	A
IR07	IR07MW21A2	H2O	12/02/91	CLPICP	CALCIUM	382000	12.2	VJ4
IR07	IR07MW21A2	H2O	06/01/92	CLPICP	CALCIUM	368000	37.2	VJ4
IR07	IR07MW23A	H2O	09/08/93	CLPFUAA	THALLIUM	28.1	2.7	J3
IR07	IR07MW23A	H2O	12/03/91	CLPFUAA	ARSENIC	1.6	1.4	VJ3
IR07	IR07MW23A	H2O	07/26/91	CLPICP	IRON	230	11.9	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	IRON	161	6.3	VJ47
IR07	IR07MW23A	H2O	06/02/92	CLPICP	IRON	211	11.3	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	IRON	257.96	18.8	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	IRON	352	6.2	J4
IR07	IR07MW23A	H2O	01/12/94	CLPICP	IRON	427.15	4.6	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	MAGNESIUM	112000	39.6	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	MAGNESIUM	116000	28.7	VJ4

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MW23A	H2O	06/02/92	CLPICP	MAGNESIUM	102000	21.6	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	MAGNESIUM	87455.5	43.9	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	MAGNESIUM	116399	20	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	MAGNESIUM	113508	51.1	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	MANGANESE	2350	0.5	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	MANGANESE	2450	0.4	VJ47
IR07	IR07MW23A	H2O	06/02/92	CLPICP	MANGANESE	1970	0.53	J3
IR07	IR07MW23A	H2O	04/28/93	CLPICP	MANGANESE	1595.85	0.6	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	MANGANESE	2260.08	0.9	J4
IR07	IR07MW23A	H2O	01/12/94	CLPICP	MANGANESE	2520.95	0.9	J4
IR07	IR07MW23A	H2O	07/26/91	CLPICP	NICKEL	40.5	15.2	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	NICKEL	32.9	17.8	VJ4
IR07	IR07MW23A	H2O	06/02/92	CLPICP	NICKEL	43	17.3	J3
IR07	IR07MW23A	H2O	04/28/93	CLPICP	NICKEL	38.58	7.4	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	NICKEL	37.48	7.4	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	NICKEL	33.94	7.2	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	POTASSIUM	13100	308	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	POTASSIUM	12900	767	VA
IR07	IR07MW23A	H2O	06/02/92	CLPICP	POTASSIUM	12700	414	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	POTASSIUM	10920.4	315	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	POTASSIUM	11521.4	373	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	POTASSIUM	12778.4	420.8	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	SODIUM	152000	24.9	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	SODIUM	157000	35.9	VA
IR07	IR07MW23A	H2O	06/02/92	CLPICP	SODIUM	145000	41.7	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	SODIUM	112986	51.3	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	SODIUM	138432	38.7	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	SODIUM	134597	45.4	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	BARIUM	83.2	0.48	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	BARIUM	84.4	0.42	VA
IR07	IR07MW23A	H2O	06/02/92	CLPICP	BARIUM	82.3	0.6	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	BARIUM	76.22	4.9	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	BARIUM	102.5	5.7	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	BARIUM	99.28	5.6	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	COBALT	8.4	4.9	A
IR07	IR07MW23A	H2O	06/02/92	CLPICP	COBALT	12.4	8.8	J3
IR07	IR07MW23A	H2O	04/28/93	CLPICP	COBALT	5.12	2.9	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	COBALT	6.85	2.7	A
IR07	IR07MW23A	H2O	07/26/91	CLPICP	ZINC	9.1	1.6	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	ZINC	9.3	6.1	VA
IR07	IR07MW23A	H2O	07/26/91	CLPICP	CALCIUM	97100	30.7	A
IR07	IR07MW23A	H2O	12/03/91	CLPICP	CALCIUM	94000	12.2	VJ4
IR07	IR07MW23A	H2O	06/02/92	CLPICP	CALCIUM	88900	37.2	A
IR07	IR07MW23A	H2O	04/28/93	CLPICP	CALCIUM	81845.6	39.7	A
IR07	IR07MW23A	H2O	09/08/93	CLPICP	CALCIUM	98842.8	17.2	A
IR07	IR07MW23A	H2O	01/12/94	CLPICP	CALCIUM	102922	84.7	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MWP-1	H2O	12/03/91	CLPFUAA	ARSENIC	3.8	1.4	J3
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	ALUMINUM	250	15.3	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	IRON	50500	11.9	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	IRON	3070	6.3	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	MAGNESIUM	1510000	792	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	MAGNESIUM	1370000	28.7	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	MAGNESIUM	1310000	216	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	MANGANESE	2590	0.5	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	MANGANESE	1690	0.4	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	MANGANESE	703	0.53	J3
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	MOLYBDENUM	27.4	3.1	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	MOLYBDENUM	11.8	5.4	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	NICKEL	7120	15.2	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	NICKEL	947	17.8	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	NICKEL	701	17.3	J3
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	POTASSIUM	18300	308	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	POTASSIUM	16300	767	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	POTASSIUM	20700	414	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	SILVER	3.6	1.5	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	SODIUM	6150000	498	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	SODIUM	5990000	35.9	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	SODIUM	6100000	417	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	BARIUM	70.1	0.48	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	BARIUM	69.4	0.42	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	BARIUM	40	0.6	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	CADMIUM	3	2.7	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	CHROMIUM	1260	2.1	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	CHROMIUM	15.4	3	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	COBALT	161	4.9	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	COBALT	29.4	10.4	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	COBALT	24	8.8	J3
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	COPPER	14.5	1.8	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	ZINC	29.3	1.6	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	ZINC	27.9	6.1	A
IR07	IR07MWP-1	H2O	07/30/91	CLPICP	CALCIUM	352000	30.7	A
IR07	IR07MWP-1	H2O	12/03/91	CLPICP	CALCIUM	352000	12.2	A
IR07	IR07MWP-1	H2O	06/02/92	CLPICP	CALCIUM	325000	37.2	A
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	IRON	198	11.9	VA
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	MAGNESIUM	1260000	792	VJ4
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	MAGNESIUM	1010000	28.7	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	MAGNESIUM	971000	21.6	A
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	MANGANESE	868	0.5	VJ4
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	MANGANESE	421	0.4	J7
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	MANGANESE	672	0.53	J3
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	MOLYBDENUM	10.4	3.1	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	MOLYBDENUM	16.7	5.4	A

TABLE B-2

DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	NICKEL	651	15.2	VA
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	NICKEL	436	17.8	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	NICKEL	234	17.3	J3
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	POTASSIUM	390000	308	VA
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	POTASSIUM	332000	767	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	POTASSIUM	329000	414	A
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	SODIUM	9860000	498	VA
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	SODIUM	8920000	35.9	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	SODIUM	9120000	417	A
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	ANTIMONY	40.7	27.6	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	ANTIMONY	44.1	31.1	A
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	BARIUM	30.9	0.48	VJ4
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	BARIUM	24.3	0.42	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	BARIUM	22.4	0.6	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	CADMIUM	4.4	2.7	A
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	COBALT	33.8	4.9	VA
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	COBALT	12.9	10.4	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	COBALT	17.3	8.8	J3
IR07	IR07MWP-2	H2O	07/30/91	CLPICP	CALCIUM	310000	30.7	VJ4
IR07	IR07MWP-2	H2O	12/05/91	CLPICP	CALCIUM	288000	12.2	A
IR07	IR07MWP-2	H2O	06/04/92	CLPICP	CALCIUM	294000	37.2	A
IR07	IR07MWS-1	H2O	07/29/91	CLPFUAA	LEAD	2.1	1.2	J3
IR07	IR07MWS-1	H2O	12/04/91	CLPFUAA	ARSENIC	1.5	1.4	J3
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	IRON	279	6.3	J7
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	MAGNESIUM	395000	39.6	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	MAGNESIUM	364000	28.7	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	MAGNESIUM	331000	21.6	VJ4
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	MANGANESE	2460	0.5	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	MANGANESE	2520	0.4	J7
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	MANGANESE	2230	0.53	VJ3
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	NICKEL	282	15.2	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	NICKEL	322	17.8	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	NICKEL	143	17.3	VJ3
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	POTASSIUM	4990	308	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	POTASSIUM	4800	767	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	POTASSIUM	7080	414	VA
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	SODIUM	917000	24.9	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	SODIUM	854000	35.9	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	SODIUM	850000	41.7	VA
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	BARIUM	395	0.48	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	BARIUM	357	0.42	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	BARIUM	325	0.6	VA
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	COBALT	14.4	4.9	A
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	COBALT	19.6	10.4	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	COBALT	10.9	8.8	VJ3
IR07	IR07MWS-1	H2O	07/29/91	CLPICP	CALCIUM	69500	30.7	A

TABLE B-2
DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MWS-1	H2O	12/04/91	CLPICP	CALCIUM	62600	12.2	A
IR07	IR07MWS-1	H2O	06/03/92	CLPICP	CALCIUM	59500	37.2	VJ4
IR07	IR07MWS-2	H2O	12/05/91	CLPCVAA	MERCURY	0.35	0.2	A
IR07	IR07MWS-2	H2O	07/26/91	CLPFUAA	ARSENIC	4.6	2.5	A
IR07	IR07MWS-2	H2O	12/05/91	CLPFUAA	ARSENIC	4.1	1.4	J3
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	ALUMINUM	23.4	21.6	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	IRON	1810	11.9	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	IRON	850	6.3	J7
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	IRON	426	11.3	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	MAGNESIUM	698000	39.6	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	MAGNESIUM	906000	28.7	A
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	MAGNESIUM	838000	21.6	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	MANGANESE	4050	0.5	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	MANGANESE	2300	0.4	J7
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	MANGANESE	1730	0.53	J3
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	MOLYBDENUM	5.3	3.1	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	NICKEL	153	15.2	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	NICKEL	42.6	17.8	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	POTASSIUM	17000	308	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	POTASSIUM	22800	767	A
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	POTASSIUM	23200	414	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	SODIUM	992000	24.9	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	SODIUM	1480000	35.9	A
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	SODIUM	1610000	208	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	BARIUM	331	0.48	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	BARIUM	339	0.42	A
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	BARIUM	996	0.6	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	COBALT	18	4.9	A
IR07	IR07MWS-2	H2O	07/26/91	CLPICP	CALCIUM	352000	30.7	A
IR07	IR07MWS-2	H2O	12/05/91	CLPICP	CALCIUM	382000	12.2	A
IR07	IR07MWS-2	H2O	06/03/92	CLPICP	CALCIUM	356000	37.2	A
IR07	IR07MWS-3	H2O	12/03/91	CLPFUAA	ARSENIC	1.4	1.4	J3
IR07	IR07MWS-3	H2O	06/02/92	CLPFUAA	ARSENIC	2.8	2	J3
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	ALUMINUM	180	25.7	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	ALUMINUM	28.9	21.6	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	IRON	1510	11.9	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	IRON	717	6.3	J7
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	IRON	1460	11.3	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	MAGNESIUM	1410000	792	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	MAGNESIUM	1240000	28.7	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	MAGNESIUM	1340000	216	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	MANGANESE	7470	0.5	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	MANGANESE	7500	0.4	J7
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	MANGANESE	7680	0.53	J3
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	NICKEL	263	15.2	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	NICKEL	285	17.8	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	NICKEL	200	17.3	J3
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	POTASSIUM	75800	308	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	POTASSIUM	88500	767	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	POTASSIUM	67700	414	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	SODIUM	4490000	498	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	SODIUM	4800000	35.9	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	SODIUM	4580000	417	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	BARIUM	1040	0.48	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	BARIUM	774	0.42	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	BARIUM	1320	0.6	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	BERYLLIUM	0.53	0.5	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	CADMIUM	3.1	2.7	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	CHROMIUM	23.5	2.1	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	COBALT	20	4.9	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	COBALT	22.7	10.4	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	COBALT	20.8	8.8	J3
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	ZINC	11.5	6.1	A
IR07	IR07MWS-3	H2O	07/26/91	CLPICP	CALCIUM	297000	30.7	A
IR07	IR07MWS-3	H2O	12/03/91	CLPICP	CALCIUM	296000	12.2	A
IR07	IR07MWS-3	H2O	06/02/92	CLPICP	CALCIUM	300000	37.2	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	IRON	432	11.9	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	IRON	182	6.3	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	IRON	520	11.3	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	MAGNESIUM	803000	39.6	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	MAGNESIUM	891000	28.7	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	MAGNESIUM	780000	21.6	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	MANGANESE	982	0.5	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	MANGANESE	1020	0.4	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	MANGANESE	1140	0.53	J3
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	MOLYBDENUM	3.8	3.1	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	MOLYBDENUM	63.7	5.4	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	NICKEL	361	15.2	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	NICKEL	338	17.8	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	NICKEL	550	17.3	J3
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	POTASSIUM	257000	308	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	POTASSIUM	271000	767	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	POTASSIUM	227000	414	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	SODIUM	6410000	498	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	SODIUM	7360000	35.9	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	SODIUM	6790000	417	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	BARIUM	92.4	0.48	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	BARIUM	82.7	0.42	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	BARIUM	67.4	0.6	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	CADMIUM	4.1	2.7	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	CHROMIUM	2.9	2.1	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	COBALT	17.3	4.9	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	COBALT	24.2	10.4	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	COBALT	22	8.8	J3
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	COPPER	18.3	1.8	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	ZINC	8.4	6.1	A
IR07	IR07MWS-4	H2O	07/25/91	CLPICP	CALCIUM	268000	30.7	A
IR07	IR07MWS-4	H2O	12/02/91	CLPICP	CALCIUM	275000	12.2	A
IR07	IR07MWS-4	H2O	06/01/92	CLPICP	CALCIUM	260000	37.2	A
IR10	IR10MW12A	H2O	08/21/90	CLPFUAA	ARSENIC	4.4	2	A
IR10	IR10MW12A	H2O	07/12/91	CLPFUAA	ARSENIC	2.5	1.6	A
IR10	IR10MW12A	H2O	07/12/91	CLPFUAA	ARSENIC	2.2	1.6	A
IR10	IR10MW12A	H2O	01/15/92	CLPFUAA	ARSENIC	3.5	1.4	A
IR10	IR10MW12A	H2O	01/15/92	CLPFUAA	ARSENIC	4.3	1.4	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	ALUMINUM	18	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	ALUMINUM	25.5	0	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	IRON	8	5.6	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	IRON	9.5	5.6	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	MAGNESIUM	129000	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	MAGNESIUM	128000	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	MAGNESIUM	161000	43.9	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	MAGNESIUM	161000	30.1	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	MAGNESIUM	152000	30.1	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	MAGNESIUM	283000	25.6	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	MAGNESIUM	172000	25.6	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	MANGANESE	243	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	MANGANESE	246	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	MANGANESE	304	0.48	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	MANGANESE	354	0.45	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	MANGANESE	301	0.45	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	MANGANESE	324	0.72	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	MANGANESE	225	0.72	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	NICKEL	23.2	14.1	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	POTASSIUM	2340	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	POTASSIUM	2410	0	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	POTASSIUM	3330	277	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	POTASSIUM	3500	277	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	POTASSIUM	3480	883	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	POTASSIUM	3130	883	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	SILVER	10.3	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	SODIUM	295000	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	SODIUM	292000	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	SODIUM	330000	52	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	SODIUM	311000	22.2	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	SODIUM	301000	22.2	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	SODIUM	409000	48.5	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	SODIUM	328000	48.5	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	BARIUM	109	0	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g}/\text{L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR10	IR10MW12A	H2O	03/09/89	CLPICP	BARIUM	117	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	BARIUM	151	1	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	BARIUM	126	0.37	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	BARIUM	120	0.37	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	BARIUM	305	0.5	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	BARIUM	157	0.5	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	BERYLLIUM	0.27	0.16	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	CHROMIUM	328	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	CHROMIUM	328	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	CHROMIUM	141	2.8	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	CHROMIUM	183	1.7	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	CHROMIUM	176	1.7	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	CHROMIUM	55.5	2.7	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	CHROMIUM	75.3	2.7	A
IR10	IR10MW12A	H2O	05/12/94	CLPICP	CHROMIUM	1011.25	0.9	A
IR10	IR10MW12A	H2O	08/30/94	CLPICP	CHROMIUM	1133.59	0.7	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	COBALT	11.6	7.9	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	COPPER	25.8	7.4	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	COPPER	5.4	1.6	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	VANADIUM	34.2	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	VANADIUM	34.2	0	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	VANADIUM	7.8	1.6	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	VANADIUM	8.9	1.6	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	VANADIUM	3.9	1.4	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	VANADIUM	4.6	1.4	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	ZINC	2.2	2	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	CALCIUM	46400	0	A
IR10	IR10MW12A	H2O	03/09/89	CLPICP	CALCIUM	45600	0	A
IR10	IR10MW12A	H2O	08/21/90	CLPICP	CALCIUM	58500	62.4	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	CALCIUM	57700	23.7	A
IR10	IR10MW12A	H2O	07/12/91	CLPICP	CALCIUM	55100	23.7	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	CALCIUM	100000	12.7	A
IR10	IR10MW12A	H2O	01/15/92	CLPICP	CALCIUM	59800	12.7	A
IR10	IR10MW12A	H2O	11/09/93	EPA6010	CHROMIUM	422.2	2.3	A
IR10	IR10MW12A	H2O	02/17/94	EPA6010	CHROMIUM	1019.21	2.3	V
IR10	IR10MW12A	H2O	03/13/89	EPA7196	CHROMIUM VI	400	50	
IR10	IR10MW12A	H2O	03/09/89	EPA7196	CHROMIUM VI	400	400	A
IR10	IR10MW12A	H2O	03/09/89	EPA7196	CHROMIUM VI	400	0	A
IR10	IR10MW12A	H2O	08/21/90	EPA7196	CHROMIUM VI	0.16	0.01	A
IR10	IR10MW12A	H2O	07/12/91	EPA7196	CHROMIUM VI	0.16	0.01	A
IR10	IR10MW12A	H2O	07/12/91	EPA7196	CHROMIUM VI	0.18	0.01	A
IR10	IR10MW12A	H2O	11/09/93	EPA7196	CHROMIUM VI	528	20	A
IR10	IR10MW12A	H2O	02/17/94	EPA7196	CHROMIUM VI	960	40	V
IR10	IR10MW12A	H2O	05/12/94	EPA7196	CHROMIUM VI	1680	100	A
IR10	IR10MW12A	H2O	08/30/94	EPA7196	CHROMIUM VI	1240	50	J5
IR10	IR10MW13A1	H2O	01/13/92	CLPFUAA	ARSENIC	1.7	1.4	A

TABLE B-2

**DETECTED RESULTS FOR METALS IN GROUNDWATER AT PARCEL B
HUNTERS POINT ANNEX
SAN FRANCISCO, CALIFORNIA**

(Concentration in $\mu\text{g/L}$)

Site	Well ID	Sample Type	Sample Date	Test Method	Analyte Name	Detected Value	Detection Limit	Qualifier
IR10	IR10MW13A1	H2O	07/11/91	CLPFUAA	SELENIUM	6.6	3.4	J2
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	ALUMINUM	43.1	34.5	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	ALUMINUM	328	34.5	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	IRON	21.8	19.8	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	IRON	31.2	19.8	A
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	MAGNESIUM	293000	0	VA
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	MAGNESIUM	305000	43.9	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	MAGNESIUM	304000	43.9	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	MAGNESIUM	294000	30.1	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	MAGNESIUM	296000	30.1	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	MAGNESIUM	286000	28.7	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	MAGNESIUM	283000	28.7	A
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	MANGANESE	138	0	VJ9
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	MANGANESE	137	0.48	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	MANGANESE	136	0.48	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	MANGANESE	44.7	0.45	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	MANGANESE	109	0.45	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	MANGANESE	108	0.4	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	MANGANESE	105	0.4	A
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	NICKEL	14.1	0	VA
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	POTASSIUM	5950	0	VJ4
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	POTASSIUM	5720	408	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	POTASSIUM	5370	408	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	POTASSIUM	15000	277	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	POTASSIUM	5330	277	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	POTASSIUM	5770	767	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	POTASSIUM	5270	767	A
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	SILVER	16.2	0	VA
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	SODIUM	574000	0	VA
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	SODIUM	602000	52	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	SODIUM	599000	52	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	SODIUM	847000	22.2	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	SODIUM	545000	22.2	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	SODIUM	563000	35.9	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	SODIUM	560000	35.9	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	ANTIMONY	31.7	27.6	A
IR10	IR10MW13A1	H2O	03/09/89	CLPICP	BARIUM	306	0	VA
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	BARIUM	245	1	A
IR10	IR10MW13A1	H2O	08/22/90	CLPICP	BARIUM	241	1	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	BARIUM	88.1	0.37	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	BARIUM	233	0.37	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	BARIUM	225	0.42	A
IR10	IR10MW13A1	H2O	01/13/92	CLPICP	BARIUM	227	0.42	A
IR10	IR10MW13A1	H2O	07/11/91	CLPICP	BERYLLIUM	0.54	0.16	A
IR10	IR10MW13A1	H2O	07/12/91	CLPICP	BERYLLIUM	0.27	0.16	A
IR10	IR10MW13A1	H2O	08/31/94	CLPICP	CHROMIUM	7.83	0.7	A